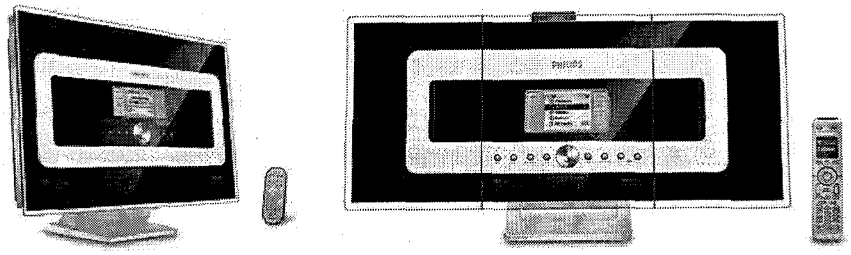
Wireless Audio Center & Station

waCS700

all versions

Service
Service
Service



Service Manual

connectedplanet

This Manual gives information on servicing the Audio Center (WAC700) of Wireless Audio Center and Station bundle (WACS700).

For servicing the Audio Station (WAS700), please refer Service Manual of WAS700 (3140 785 30520)

CLASS 1
LASER PRODUCT

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Version 1.1

PHILIPS

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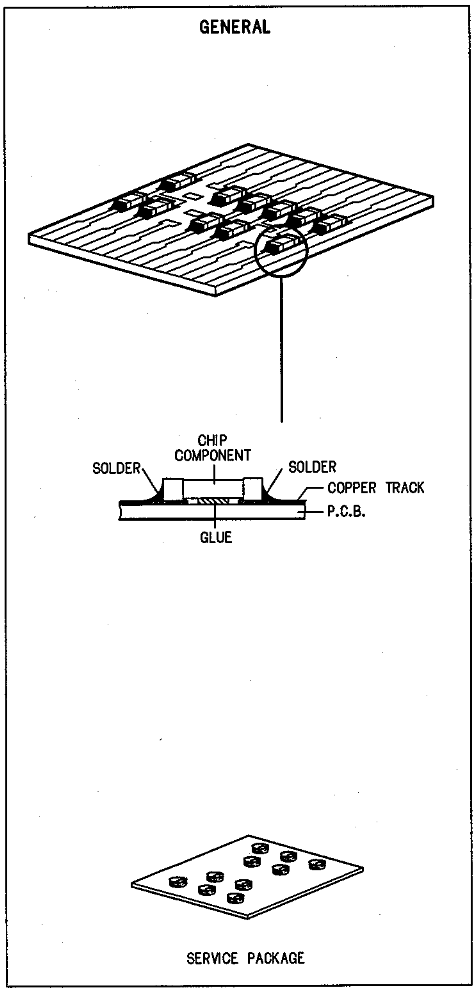
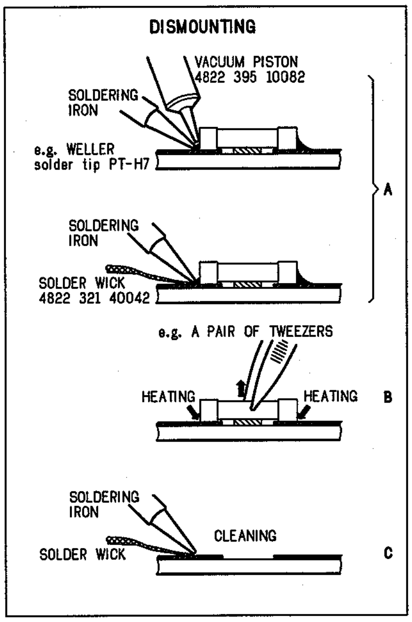
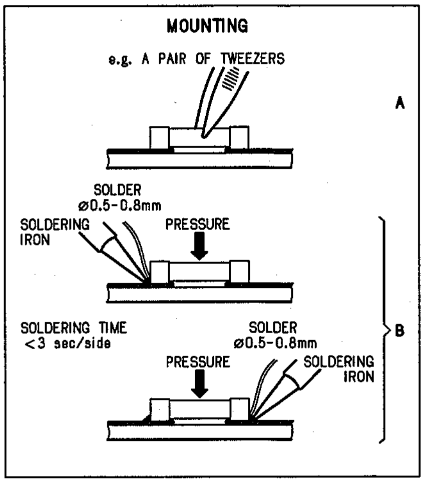
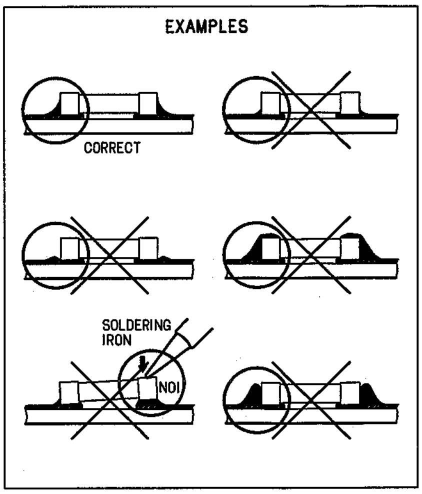
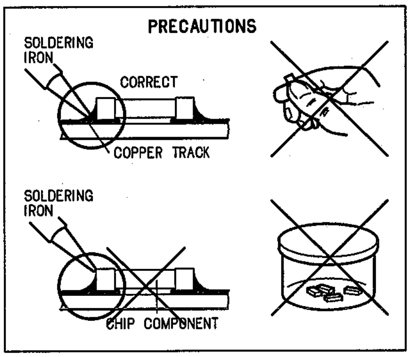
HANDLING CHIP COMPONENTS


GENERAL
CHIP COMPONENT
SOLDER
SOLDER
COPPER TRACK
P.C.B.
GLUE
SERVICE PACKAGE


DISMOUNTING
VACUUM PISTON
4822 395 10082
SOLDERING IRON
e.g. WELLER
solder tip PT-H7
A
SOLDERING IRON
SOLDER WICK
4822 321 40042
e.g. A PAIR OF TWEEZERS
HEATING
HEATING
B
SOLDERING IRON
CLEANING
SOLDER WICK
C


MOUNTING
e.g. A PAIR OF TWEEZERS
A
SOLDER
ø0.5-0.8mm
SOLDERING IRON
PRESSURE
SOLDERING TIME
<3 sec/side
SOLDER
ø0.5-0.8mm
B
PRESSURE
SOLDERING IRON


EXAMPLES
CORRECT
SOLDERING IRON
NO!


PRECAUTIONS
SOLDERING IRON
CORRECT
COPPER TRACK
SOLDERING IRON
CHIP COMPONENT

SERVICE TOOLS

TORX T10 screwdriver with shaftlength 150mm	4822 395 50423
TORX screwdriver set SBC 163	4822 295 50145
Audio signal disc SBC 429	4822 397 30184
Playability test disc SBC 444	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints) SBC 426/426A	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause")	4822 397 30155

AVAILABLE ESD PROTECTION EQUIPMENT

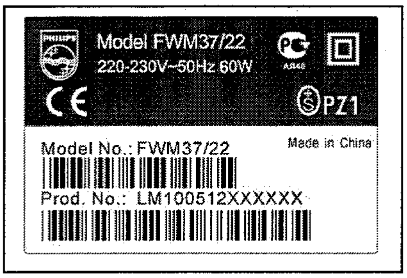
anti-static table mat large 1200x650x1.25mm	4822 466 10953
small 600x650x1.25mm	4822 466 10958
anti-static wristband	4822 395 10223
connection box (3 press stud connections, 1MΩ)	4822 320 11307
extendible cable (2m, 2MΩ, to connect wristband to connection box)	4822 320 11305
connecting cable (3m, 2MΩ, to connect table mat to connection box)	4822 320 11306
earth cable (1MΩ, to connect any product to mat or to connection box)	4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat)	4822 310 10671
wristband tester	4822 344 13999

INFORMATION ABOUT LEAD-FREE SOLDERING

Philips CE is producing lead-free sets from 1.1.2005 onwards.
IDENTIFICATION:

Regardless of special logo (not always indicated) one must treat all sets from 1 Jan 2005 onwards, according next rules:

Example S/N:



Bottom line of typeplate gives a 14-digit S/N. Digit 5&6 is the year, digit 7&8 is the week number, so in this case 2005 wk12

So from 0501 onwards = from 1 Jan 2005 onwards

***Important note**: In fact also products of year 2004 must be treated in this way as long as you avoid mixing solder-alloys (leaded/ lead-free). So best to always use SAC305 and the higher temperatures belong to this.*

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
  - To reach at least a solder-temperature of 400°C,
  - To stabilize the adjusted temperature at the solder-tip
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360°C – 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off un-used equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free).
  If one cannot avoid or does not know whether product is lead-free, clean carefully the solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).
- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:
  - always use the 12nc-recognizable soldering temperature profile of the specific BGA (for de-soldering always use the lead-free temperature profile, in case of doubt)
  - lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening, dependent of MSL-level seen on indicator-label in the bag, the BGA-IC possibly still has to be baked dry. (MSL=Moisture Sensitivity Level). This will be communicated via AYS-website.
  Do not re-use BGAs at all.
- For sets produced before 1.1.2005 (except products of 2004), containing leaded solder-alloy and components, all needed spare-parts will be available till the end of the service-period. For repair of such sets nothing changes.
- On our website **www.atyourservice.ce.Philips.com** you find more information to:
  - BGA-de-/soldering (+ baking instructions)
  - Heating-profiles of BGAs and other ICs used in Philips-sets

  You will find this and more technical information within the "magazine", chapter "workshop news".

For additional questions please contact your local repair-helpdesk.

SERVICE INSTRUCTION

Safety regulations require that after a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the AC Power lead for external damage.
- Check the strain relief of the AC Power cord for proper function.
- Check the electrical DC resistance between the AC Power Plug and the secondary side (only for sets which have a AC Power isolated power supply):

1. Unplug the AC Power cord and connect a wire between the two pins of the AC Power plug.
2. Set the AC Power switch to the "on" position (keep the AC Power cord unplugged!).
3. Measure the resistance value between the pins of the AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be larger than 4.5 Mohm (For U.S. it should be between 4.2 Mohm and 12 Mohm).
4. Switch "off" the set, and remove the wire between the two pins of the AC Power plug.

- Check the cabinet for defects, to avoid touching of any inner parts by the customer.

TECHNICAL SPECIFICATIONS

GENERAL

Mains voltage	-/22	230 V
	-/05	240 V
	-/37	120 V
Mains frequency	-/22/05	50 Hz
	-/37	60 Hz
Battery	Centre remote	6V (R03 x 4)
	Station remote	CR2025 x 1
Power consumption		
Active	WAC700	< 35 W
	WAS700	< 25 W
Standby	WAC700	< 18 W
	WAS700	< 14 W
Eco-standby	WAC700	< 1 W
	WAS700	< 1 W
Dimension (W x H x D)		
	WAC700	608 x 303 x 175 mm
	WAS700	360 x 283 x 128 mm
Weight	WAC700	7.7 Kg
	WAC700	4.2 Kg

AMPLIFIER

Output power (RMS)		
	WAC700	2 x 15 W + 2 x 25W
	WAS700	2 x 5 W + 1 x 10 W
Speaker impedance		
	WAS700	16 Ω (Panel)
		8 Ω (subwoofer)
	WAC700	6 Ω (Panel)
		12 Ω (subwoofer)
Frequency response		50 Hz - 16 kHz (±3dB)
S/N Ratio		> 72 dBA (IEC)
Aux input sensitivity		500mV
Headphone Impedance		21 Ω – 150 Ω

WIRELESS

Wireless standard (backward compatible to 802.11b)	802.11g
Wireless security	WEP 64 or 128bit WPA=PSK
Frequency range	2412-2462 MHz (CH1-CH11)

TUNER - FM SECTION

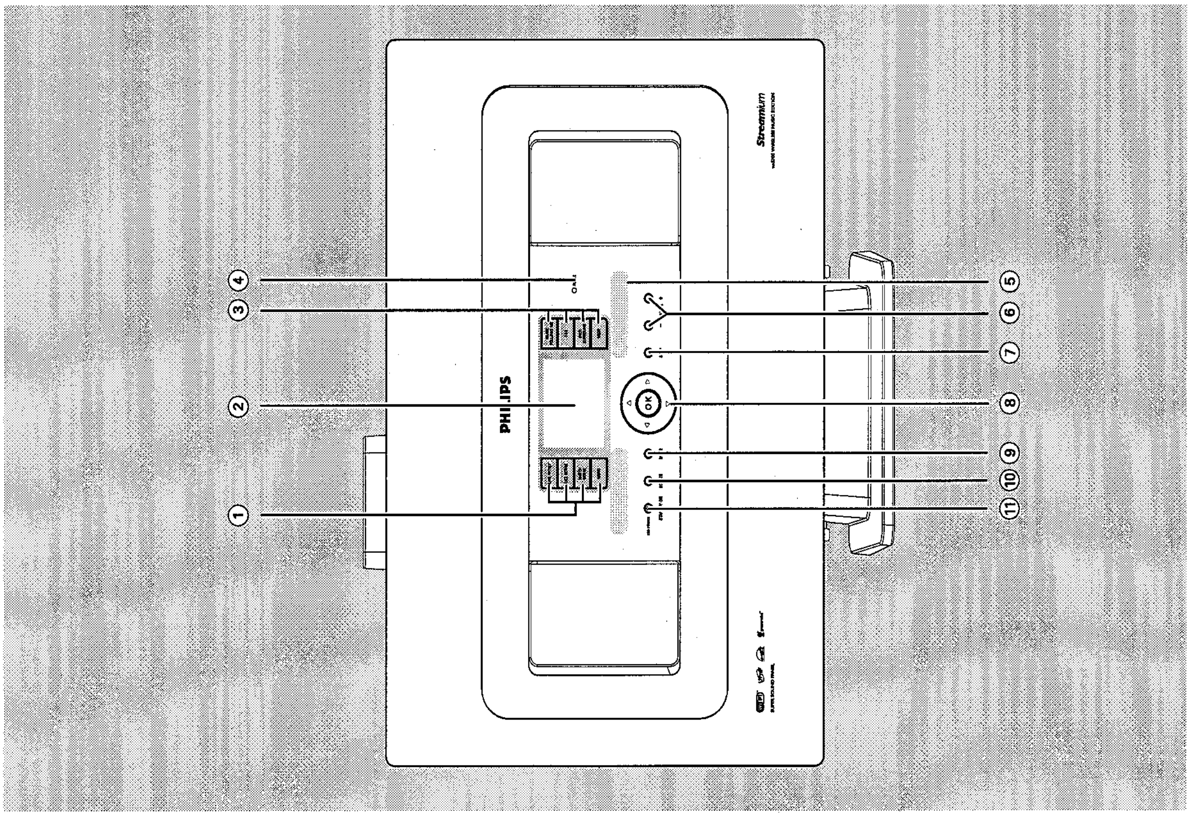
Tuning range	87.5 - 108 MHz
IF frequency	10.7 MHz ± 0.2 MHz
Number of presets	40
FM Antenna/cable	COAX / T-antenna

HDD/CD player (wac700 only)

Frequency Range	30-18000 Hz, -3 dB
S/N ratio	≥ 72 dBA (IEC)
MPEG 1 Layer 3 (MP3-CD)	MPEG AUDIO
MP3-CD bit rate	32-256 kbps, VBR, 128 kbps advised
WMA bit rate	up to 160kbps
Sampling frequencies	32, 44.1, 48 kHz
HDD Storage capacity	40GB*
Recording quality	128kbps or 160kbps
Recording speed	1x, 4x

* Actual free space is 35GB or less, due to the buffer partition for MP3 compression, firmware, music CD database and demo tracks stored.

CONNECTION AND CONTROLS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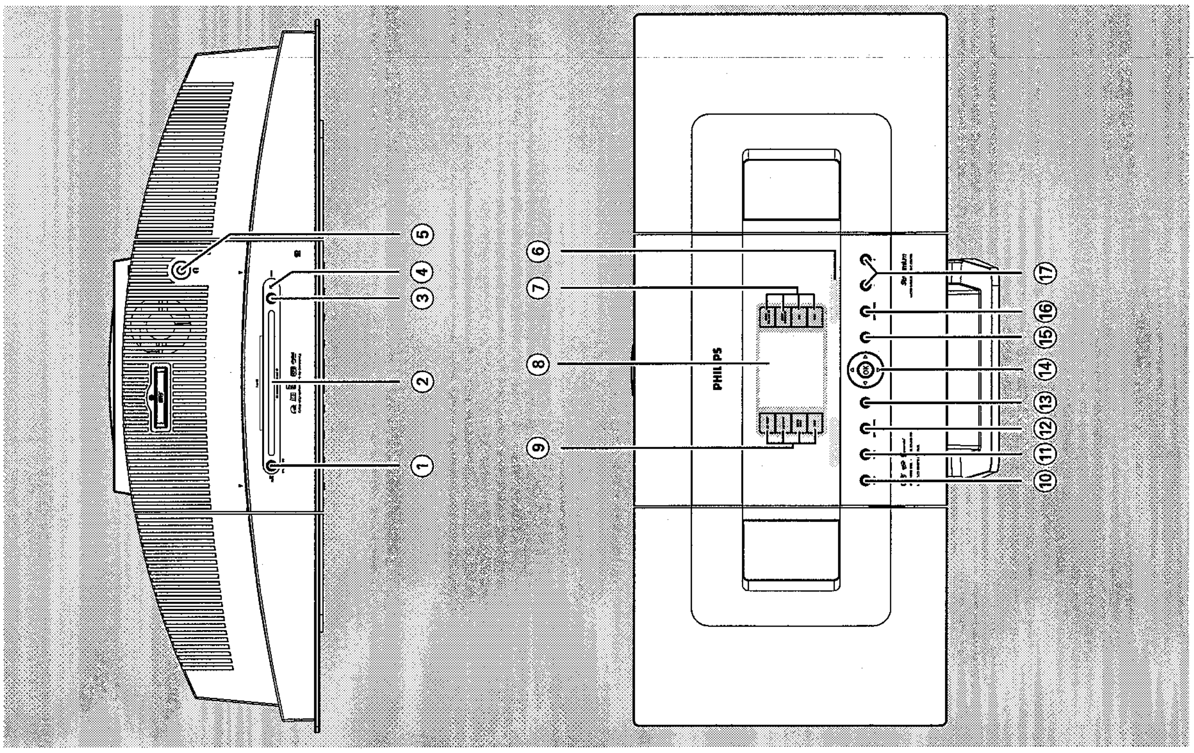
Streamium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⑰
PHILIPS
OK

Controls *(illustrations on page 3)*

Controls on the Center *(Top and front panels)*

① **STANDBY-ON/ ECO POWER**
- press briefly to switch Center on or to standby mode ;
- press and hold to switch Center to Eco Power mode or on

② **CD slot loader**

③ **EJECT**
- ejects a disc from the slot loader

④ **ACTIVE**
- HD: lights up green during CD ripping /MP3 conversion

⑤ 🎧
- 3.5 mm headphone socket
  Helpful hints:
  – Adjust the volume to a moderate level before you plug in the headphones.
  – Connecting headphones will switch off the speakers.

⑥ **IR**
- sensor for the infrared remote control
  ***Helpful hints:** Always point the remote control towards this sensor.*

⑦ **MUSIC FOLLOWS ME**
- HD: moves music playback from Center to Station, or from Station to Center

MUSIC BROADCAST
- HD: broadcast music from Center to Station

DBB (**D**ynamic **B**ass **B**oost)
- turns the bass enhancement on (**DBB1, DBB2, DBB3**) or off.

VIEW
- toggles playback display and previous option list

⑧ **Display**
- shows status of Center

⑨ **SAME ARTIST**
- HD: plays all the tracks of current Artist

SAME GENRE
- HD: plays all the tracks of current Genre

SMART EQUALIZER
- HD: selects match sound setting for current Genre

MENU
- enters or exits setup menu.

⑩ **SOURCE**
- selects sound source **HD**, **CD**, **Radio** or **AUX**
- **In standby mode:** switches Center on and selects sound source **HD**, **CD**, **Radio** or **AUX**

⑪ **RECORD**
- CD/Radio/AUX:

Controls *(illustrations on page 4)*

Controls on the Station *(front panel)*

① **SAME ARTIST**
- HD: plays all the tracks of current artist

SAME GENRE
- HD: plays all the tracks of current genre

SMART EQUALIZER
- HD: selects match sound setting for current genre

MENU
- enters or exits setup menu

② **Display**
- shows status of Station

③ **MUSIC FOLLOWS ME**
- HD: moves music playback from Station to Center, or from Center to Station

DBB (Dynamic **B**ass **B**oost**)**
- turns the bass enhancement on (**DBB1, DBB2, DBB3**) or off

INCR. SURROUND
- selects surround sound effect

VIEW
- toggles playback display and previous option list

④ **ACTIVE**
- HD: lights up green when streaming is activated between Center and Station

⑤ **IR**
- sensor for the infrared remote control
  ***Helpful hints:** Always point the remote control towards this sensor.*

⑥ **VOLUME -, +**
- adjusts the volume level

⑦ **STOP**
- stops playback
- **In standby mode:** activates/ deactivates the demostration mode *(press and hold the button for 5 seconds)*

⑧ **◀ / ▶ / ▲ / ▼**
- navigation controls (left, right, up, down) to scroll through the option list

◀
- HD: returns to previous option lists
- **Radio:** enters the list of preset stations

▲ / ▼
- HD: skips/searches tracks/passage backward/ forward (in playback screen); fast scrolls the option list
- **Radio:** tunes to radio stations

▶ / OK
- confirms selection

OK
- HD: starts or pauses playback

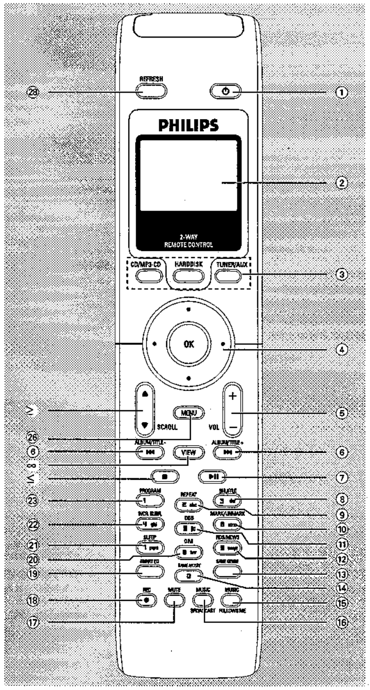
⑨ **MUTE**
- switches the sound off temporarily

⑩ **SOURCE**
- selects sound source **HD**, **Radio** or **AUX**
- **In standby mode:** switches Station on and selects sound source **HD**, **Radio** or **AUX**

⑪ **STANDBY-ON/ ECO POWER**
- press briefly to switch Station on or to standby mode;
- press and hold to switch Station to Eco Power mode or on

Controls

Center's 2-way remote control


REFRESH
PHILIPS
2-WAY REMOTE CONTROL
CD/MP3-CD
HARDDISK
TUNER/AUX
OK
MENU
SCROLL
VOL
VIEW
PROGRAM
REPEAT
SHUFFLE
SLEEP
DIM
REC
MUTE
MUSIC
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① ⏻
- press briefly to switch the set to standby mode
- press and hold to switch the set to Eco Power mode or on

② **Synchro display**
- synchronous display of the set's status

③ **Source buttons**

CD/MP3-CD
- selects **CD** source
- **In standby mode:** switches the set on and selects **CD** source.

HARDDISK
- selects **HD** source
- In standby mode: switches the set on and selects **HD** source

TUNER/AUX
- selects **Radio** source or the audio input from an additional connected appliance
- **In standby mode:** switches the set on and selects **Radio** source or the audio input from an additional connected appliance

④ **◀ / ▶ / ▲ / ▼**
- navigation controls (left, right, up, down) to scroll through the option list

◀
- HD/CD: returns to previous option lists
- Radio: enters the list of preset stations

▲ / ▼
- HD/CD: skips/searches tracks/passage backward/ forward (in playback screen); fast scrolls the option list
- Radio: tunes to radio stations

▶ / OK
- confirms selection

⑤ **VOL +, -**
- adjusts the volume level

⑥ **|◀◀ / ▶▶|**
- HD/CD: skips/searches tracks/passage backward/forward (in playback screen)

⑦ **▶II**
- HD/CD: starts or pauses playback

⑧ **SHUFFLE**
- selects random playback

⑨ **REPEAT**
- selects continuous playback

⑩ **MARK/UNMARK**
- CD: selects or deselects tracks to be recorded on hard disk

⑪ **DBB**(**D**ynamic **B**ass **B**oost)
- turns the bass enhancement on (**DBB1, DBB2, DBB3**) or off

⑫ **RDS/NEWS**
- Radio: selects RDS information
- HD/CD/AUX: turns NEWS function on or off

⑬ **SAME GENRE**
- HD: plays all the tracks of current Genre

⑭ **SAME ARTIST**
- HD: plays all the tracks of current Artist

⑮ **MUSIC FOLLOWS ME**
- HD: moves music playback from Center to Station, or from Station to Center

Controls

⑯ **MUSIC BROADCAST**
- HD: broadcasts music from Center to Station

⑰ **MUTE**
- switches the sound off temporarily

⑱ **REC**
- CD/Radio/AUX: starts the recording to hard disk

⑲ **SMART EQ**
- HD: selects match sound setting for current genre

⑳ **DIM**
- changes the brightness of display illumination

㉑ **SLEEP**
- ajusts/displays/switches off sleep timer

㉒ **INCR. SURROUND**
- selects surround sound effect

㉓ **PROGRAM**
- manually programs preset radio stations

㉔ **■**
- stops playback or recording
- **In standby mode:** activates/ deactivates the demostration mode *(press and hold the button for 5 seconds)*

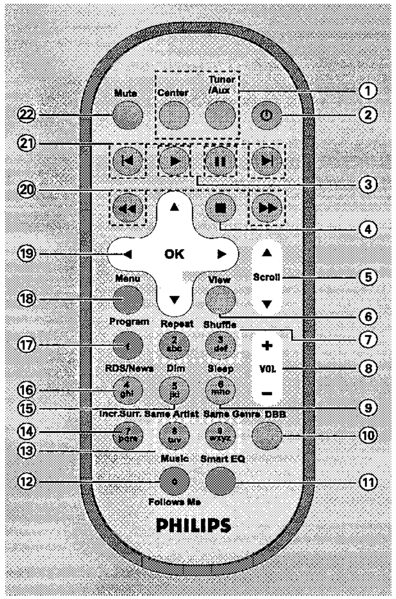
VIEW
- toggles playback screen and previous option list

㉖ **MENU**
- enters or exits setup menu

㉗ **▲ / ▼ SCROLL**
- scroll the display screen upward or downward

㉘ **REFRESH**
- sychronize remote control's display with the set's display

Station's remote control


Mute
Center
Tuner /Aux
OK
Menu
View
Scroll
Program
Repeat
Shuffle
VOL
RDS/News
Dim
Sleep
Incr.Surr.
Same Artist
Same Genre
DBB
Music
Smart EQ
Follows Me
PHILIPS
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① **Source buttons**

Center
- selects **HD** source (located on Center)
- **In standby mode:** switches the set on and selects **HD** source (located on Center)

Tuner/Aux
- selects **Radio** source or the audio input from an additional connected appliance
- **In standby mode:** switches the set on and selects **Radio** source or the audio input from an additional connected appliance

② ⏻
- press briefly to switch the set to standby mode
- press and hold to switch the set to Eco Power mode or on

③ **▶**
- HD/CD: starts playback

II
- HD/CD: pauses playback

Controls

④ ■
- stops playback or recording
- In **standby mode:** activates/ deactivates the demostration mode (press and hold the button for 5 seconds)

⑤ **▲ / ▼ Scroll**
- scroll the display screen upward or downward

⑥ **View**
- toggles playback display and previous option list

⑦ **Repeat**
- selects random playback

Shuffle
- selects continuous playback

⑧ **VOL +, -**
- adjusts the volume level

⑨ **Sleep**
- ajusts/displays/switches off sleep timer

⑩ **DBB**(**D**ynamic **B**ass **B**oost)
- turns the bass enhancement on (**DBB1, DBB2, DBB3**) or off

⑪ **Smart EQ**
- HD: selects match sound setting for current genre

⑫ **Music Follows Me**
- HD: moves music playback between Center and Station

⑬ **Same Artist**
- HD: plays all the tracks of current Artist

Same Genre
- HD: plays all the tracks of current Genre

⑭ **Incr. Surr.**
- selects surround sound effect

⑮ **Dim**
- changes the brightness of display illumination

⑯ **RDS/News**
- **Radio:** selects RDS information
- HD/CD/AUX: turns NEWS function on or off

⑰ **Program**
- manually programs preset radio stations

⑱ **Menu**
- enters or exits setup menu

⑲ ◀ / ▶ / ▲ / ▼
- navigation controls (left, right, up, down) to scroll through the option list

◀
- **HD/CD:** returns to previous option lists
- **Radio:** enters the list of preset stations

▲ / ▼
- **HD/CD:** skips/searches tracks/passage backward/ forward (in playback screen); fast scrolls the option list
- **Radio:** tunes to radio stations

▶ / OK
- confirms selection

⑳ ◀◀ / ▶▶
- **HD/CD:** searches track passage backward/ forward (in playback screen)

㉑ |◀◀, ▶▶|
- **HD/CD:** skips tracks backward/forward (in playback screen)

㉒ **MUTE**
- switches the sound off temporarily

For more information onoperation instruction please visit Philips Audio internet site :

http://www.audio.philips.com

Appendix

How to mount your Center and Station onto walls

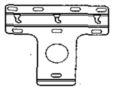
IMPORTANT!

– The wall mounting instructions are for the use of the qualified wall mounting person only!

– Ask a qualified person to help you with the wall mounting, which includes drilling holes on the wall, fixing the mounting brackets to the wall, and mounting the sets onto the brackets.

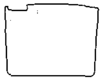
What's in the supplied mounting kits

For Center:



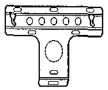
1 x mounting bracket

3 x screws (for Center mounting)



1 x protective card sheet

For Station:



1 x mounting bracket

2 x screws (for Station mounting)

What else you'll need

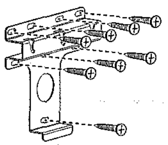
– 8 x screws for fixing the Center's bracket
– 6 x screws for fixing the Station's bracket
– Drilling tools (e.g. electric drill)

Preparation

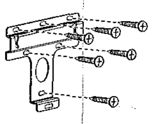
- To find a suitable location for mounting, try your necessary rear connections and the Wi-Fi connection between Center and Station (see the chapter **Installation**).
- Ask a qualified person to help you with the wall mounting, who should:
  – to avoid unexpected damage, learn about the piping, wiring and other relevant information inside your walls;
  – according to your walls' materials, decide what type of screws you need to fix the mounting brackets and hold the weight of a Center or Station;
  – according to the drilling requirements, choose suitable drilling tools;
  – take other precautions necessary for the wall mounting work.

Mounting your Center or Station

① Align the bracket (for Center or Station) in the chosen location on a wall. Use a pencil to mark the drilling positions.



Center

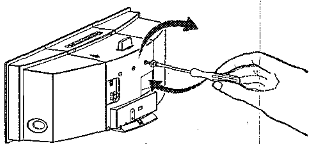


Station

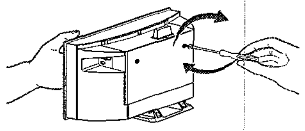
② Drill holes as marked.

③ Fix the brackets to the wall using suitable screws (not supplied).

④ As shown, fasten the supplied screws to your Center or Station using a screwdriver.



Center

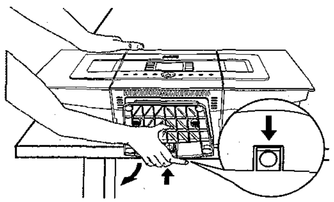


Station

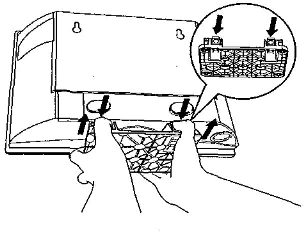
Appendix

⑤ To detach the stand from Center or Station,

a. As shown, hold down the **Lock•unlock** button(s).
b. Move out the stand to detach.

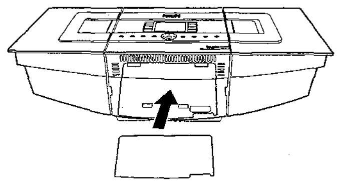


Center

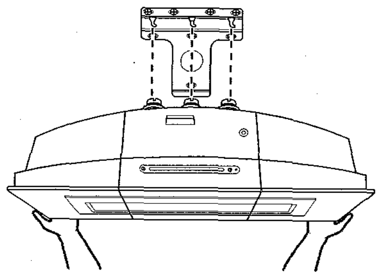


Station

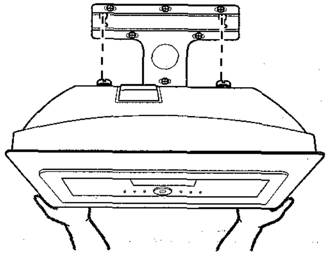
⑥ On Center, insert the supplied protective card sheet where the stand was installed.



⑦ As shown, hook and mount Center or Station in place.



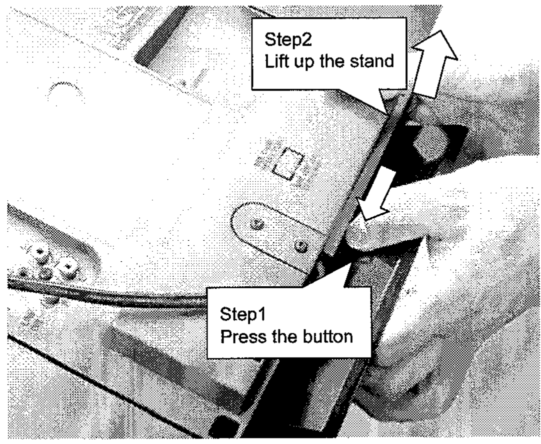
Center



Station

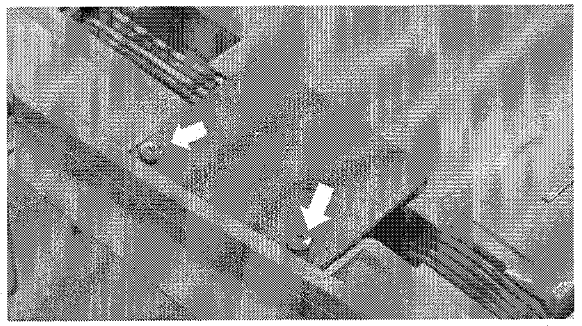
DISASSEMBLY INSTRUCTION

1. Remove Stand

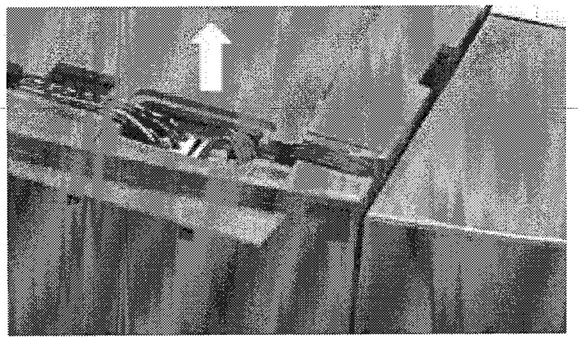

Step2
Lift up the stand
Step1
Press the button

2. Remove Loudspeaker Box

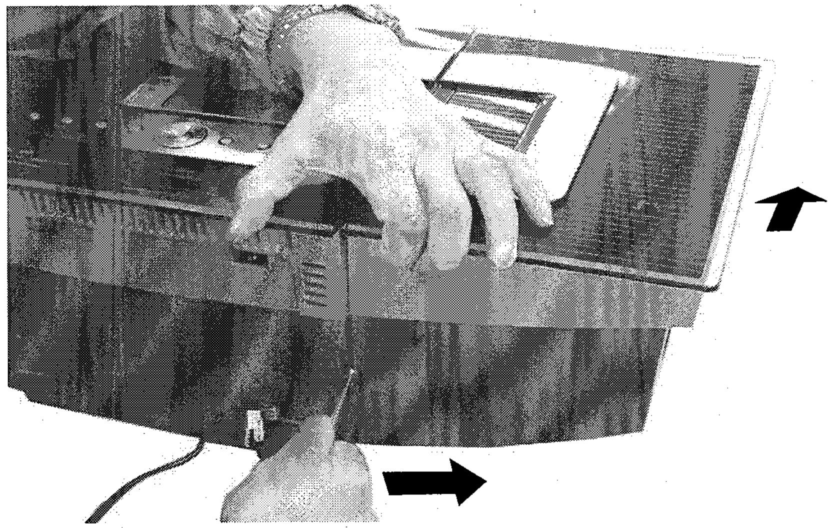
a. remove screws M2x8 - 2 pcs



b. pull out speaker cable connector

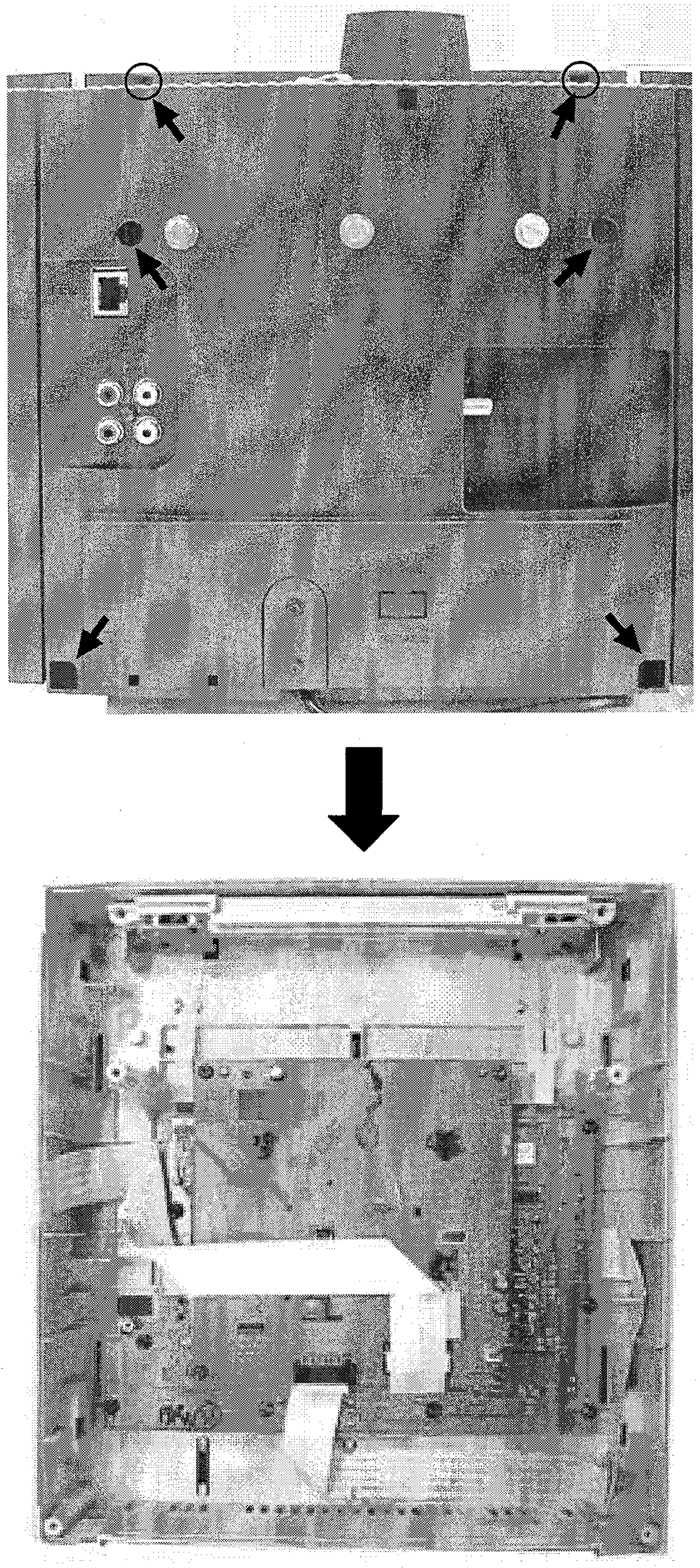


c. take out loudspeakers



3. Separate Front and Back Cabinet.

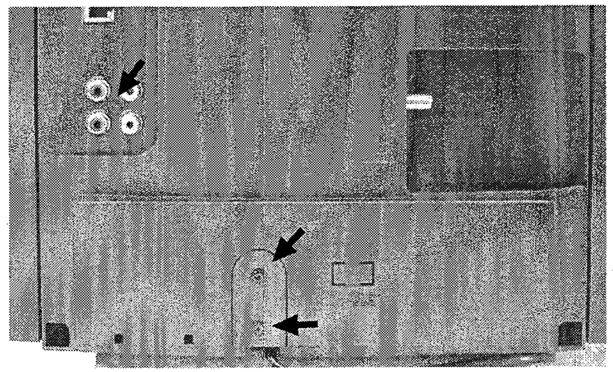
a. remove screws T3x20 - 6 pcs.



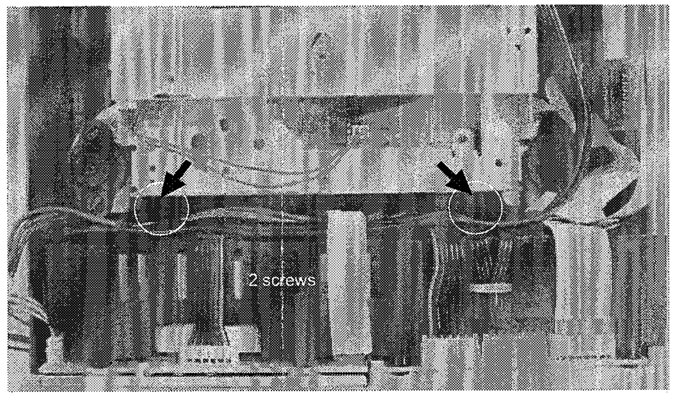
4. Remove Core Pre-assembly

a. remove AC cord cover - screw T3x8 2 pcs.

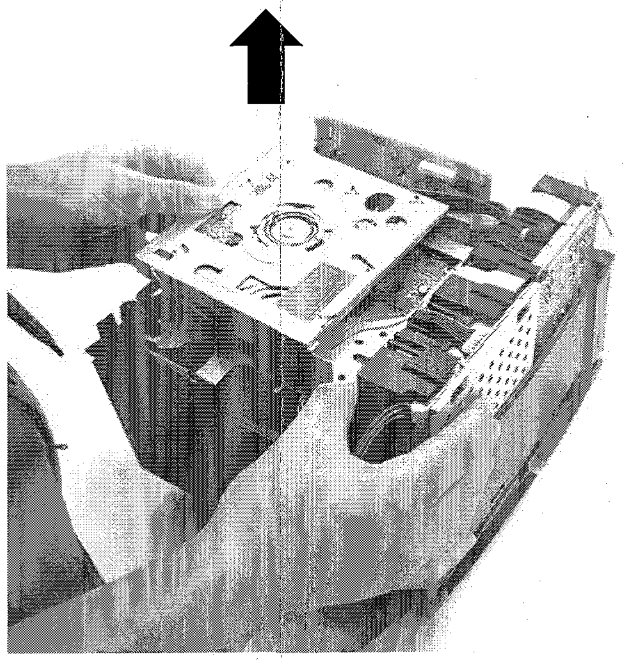
b. remove screw M3x10 - 1 pc. (Aux Jack)



c. remove scrrews M3x10 - 2 pcs.



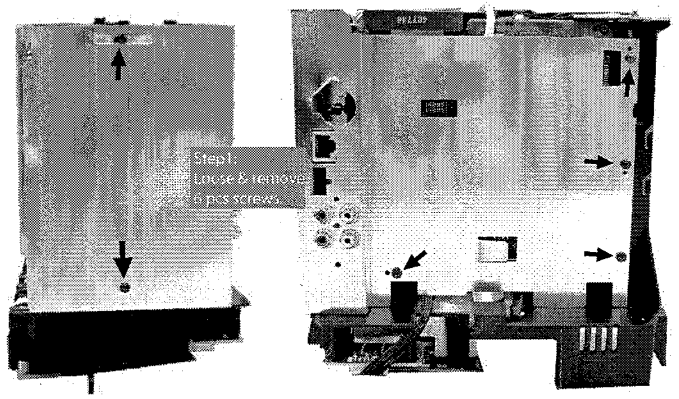
d. pull out Core Pre-assembly

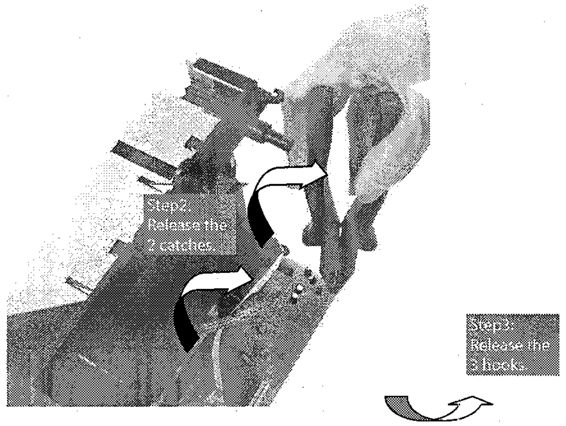


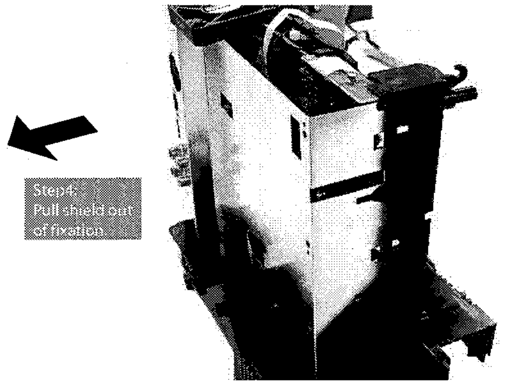
DISASSEMBLY INSTRUCTION

5. Remove Shield Sheet

a. remove screw T3x10 - 6 pcs.

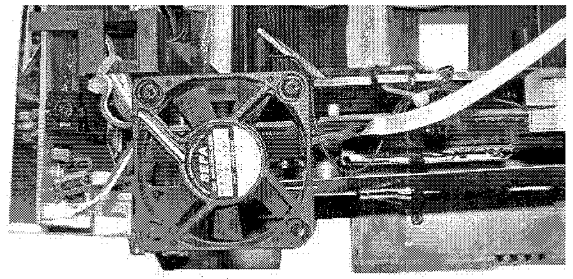

Step1:
Loose & remove
6 pcs screws.


Step2:
Release the
2 catches.
Step3:
Release the
3 hooks.


Step4:
Pull shield out
of fixation.

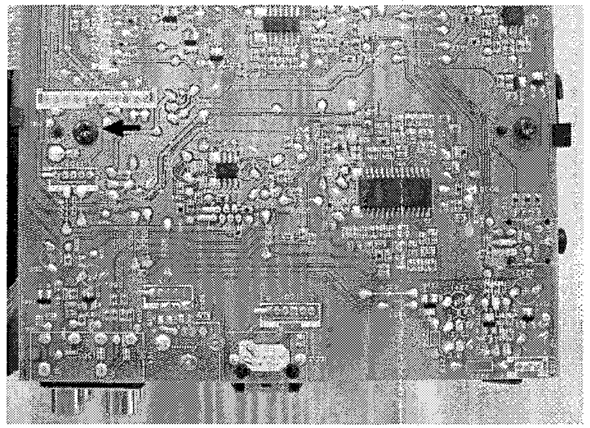
6. Remove cooling FAN

- remove screw T3x12 - 2 pcs.



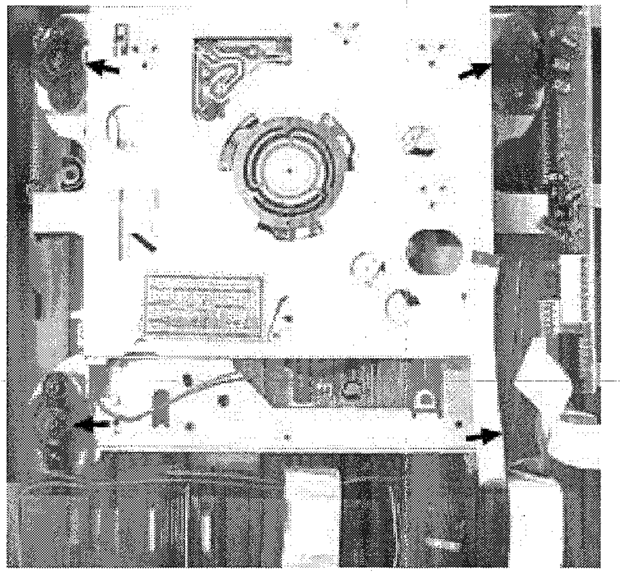
7. Remove PBAS - AF

- remove screws T3x10 - 1 pcs.

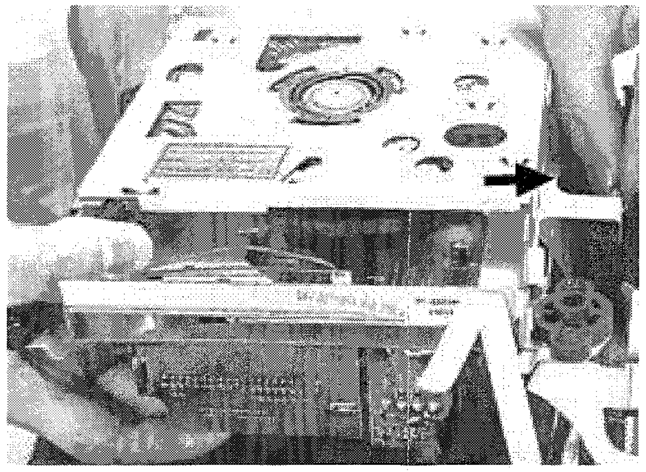


8. Remove Bracket CD/HDD

a. remove screws T3x10 - 2 pcs.

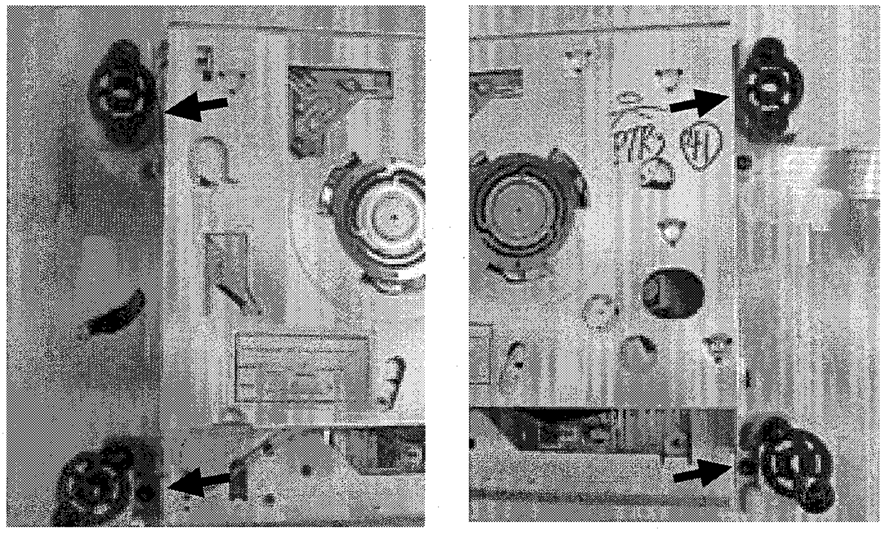


b. remove Spring CD/HDD



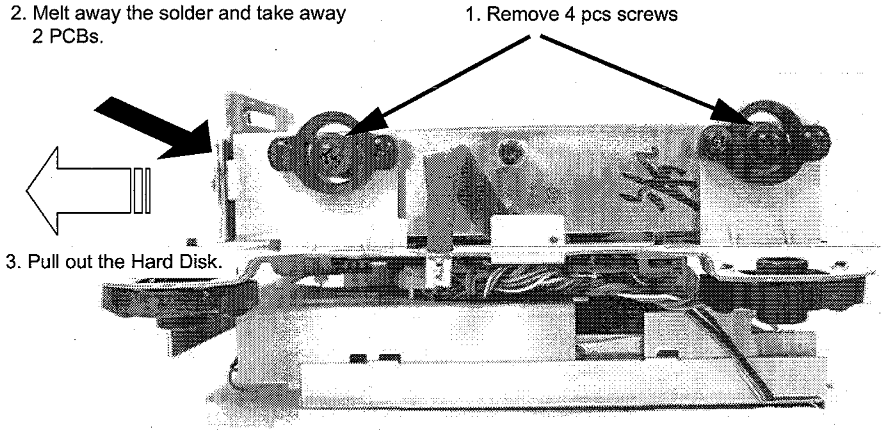
9. Remove CD Module

- remove screws T2.5x8 - 4 pcs.



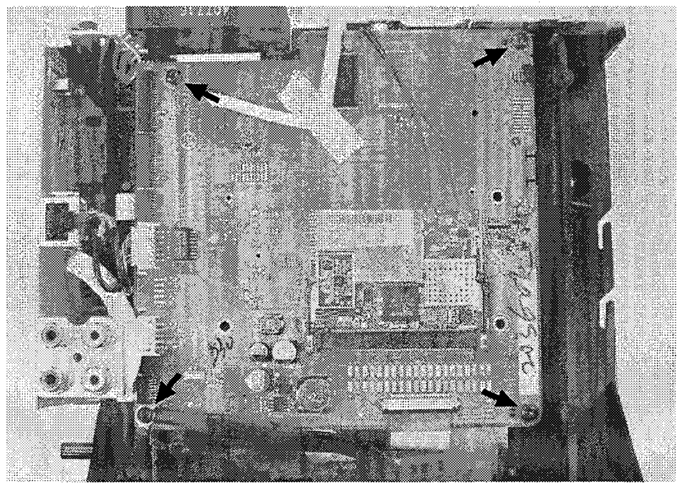
10. Remove Hard Disk

- remove screws (314107040061) - 4 pcs.


2. Melt away the solder and take away 2 PCBs.
1. Remove 4 pcs screws
3. Pull out the Hard Disk.

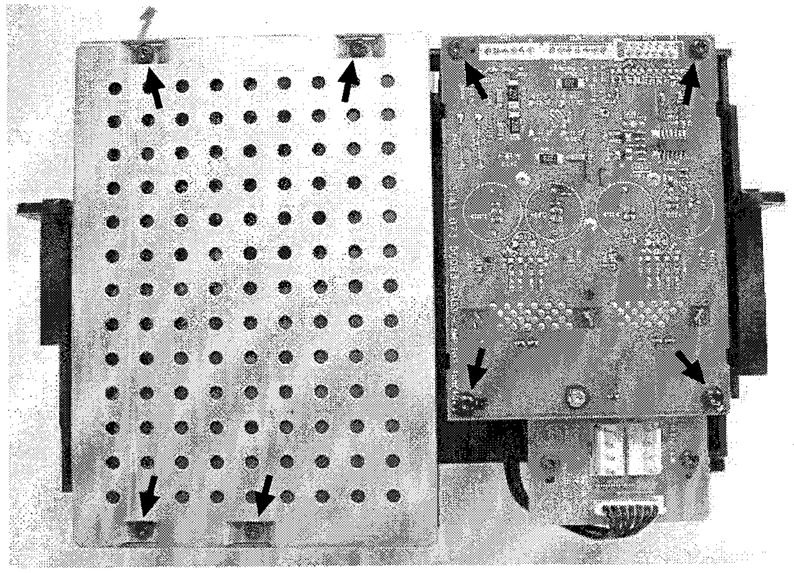
11. Remove HAS module

- remove screws T3x10 - 4 pcs.

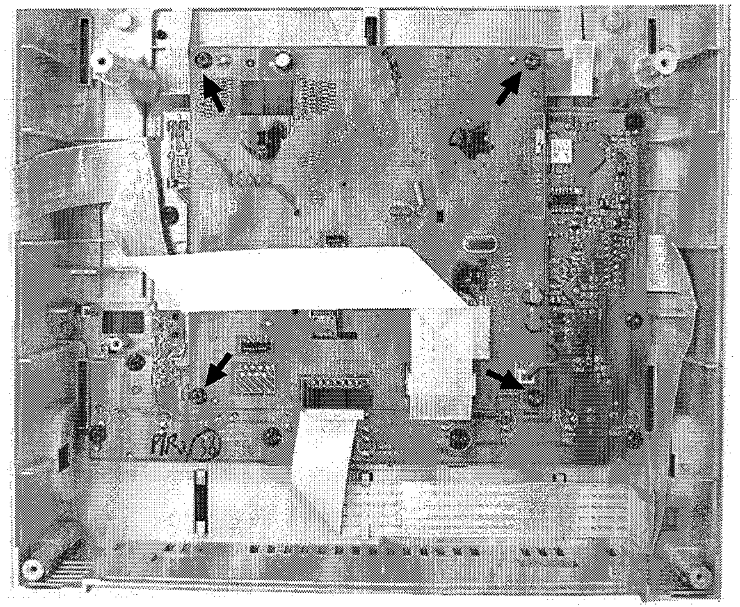


DISASSEMBLY INSTRUCTION

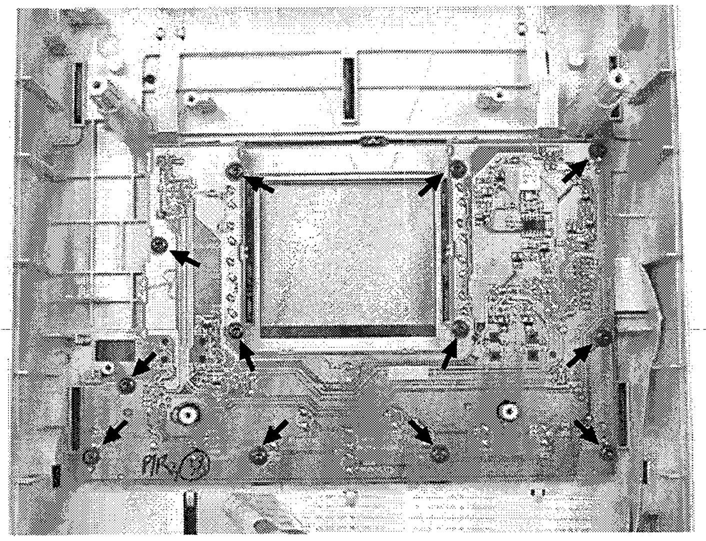
12. Remove AMP board and Supply module
- remove screws T3x12 - 8 pcs.



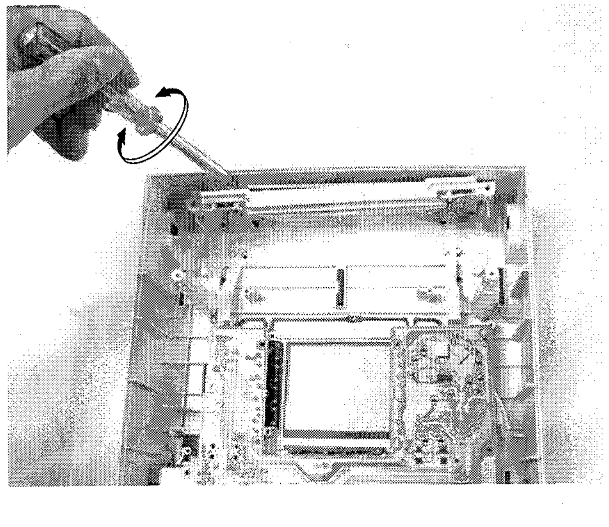
13. Remove PBAS Front
- remove screws T3x10 - 4 pcs.



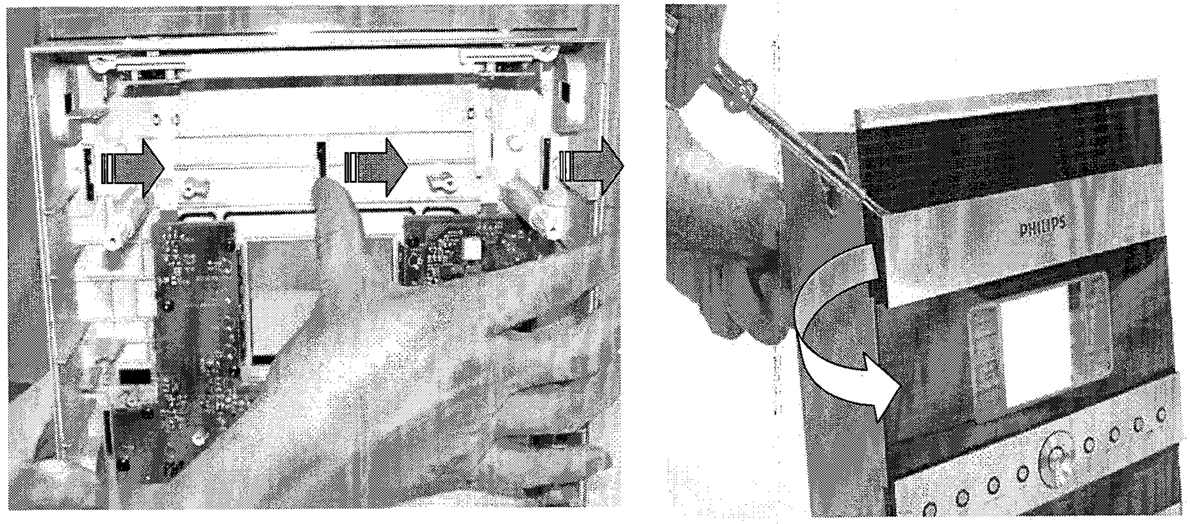
14. Remove Panel Key board
- remove screws T3x10 - 12 pcs.



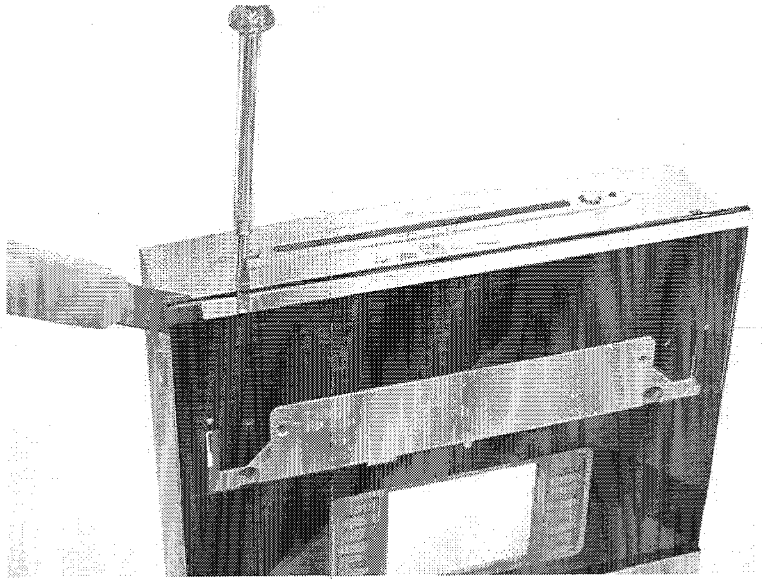
15. Remove BTN PWR/REC PRE-ASSY



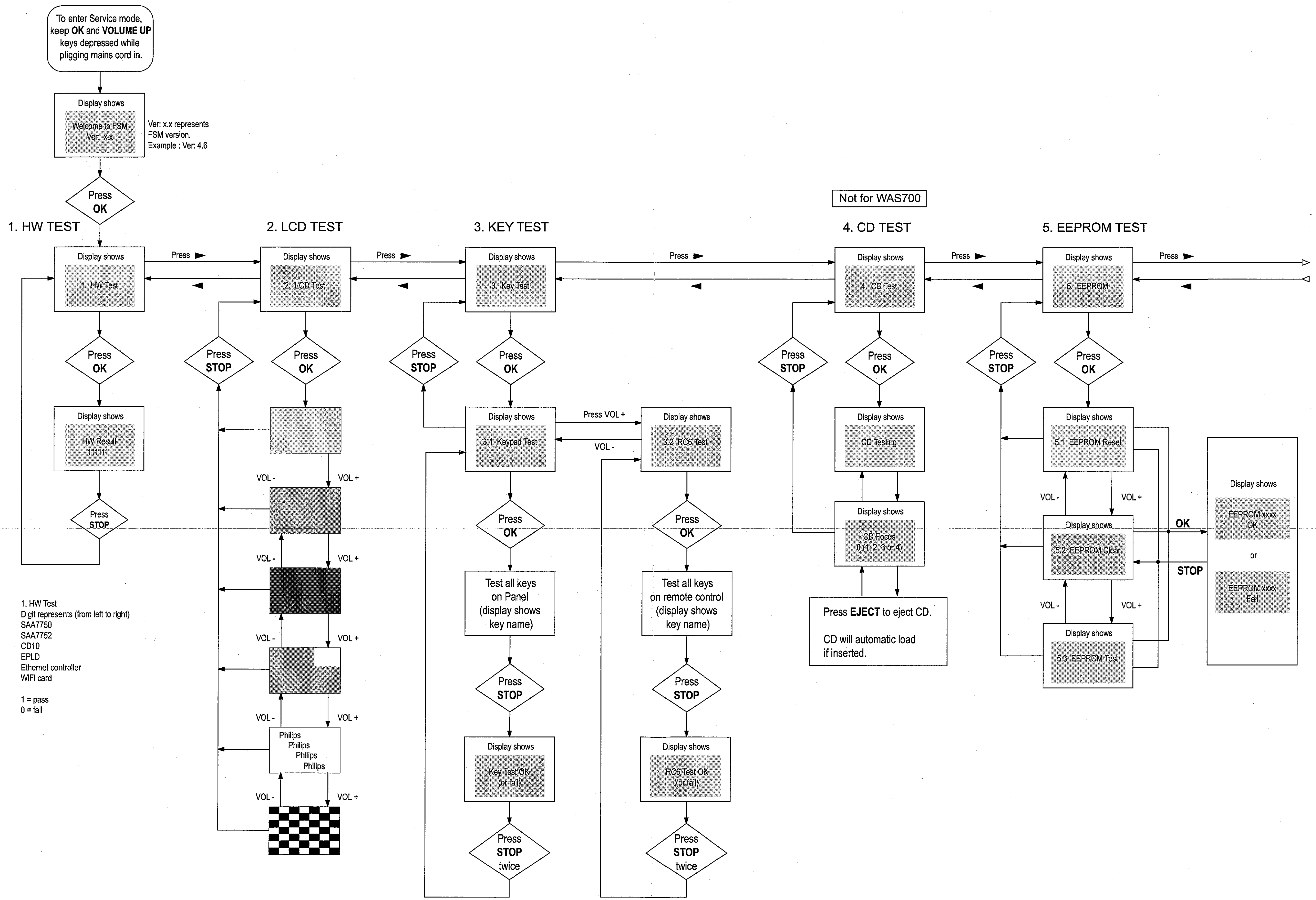
16. Remove PANEL DISPLAY and PANEL CEN Pre-assy



17. Remove COVER FNT CEN BTM and COVER FNT CEN UPPER



SERVICE TEST PROGRAM

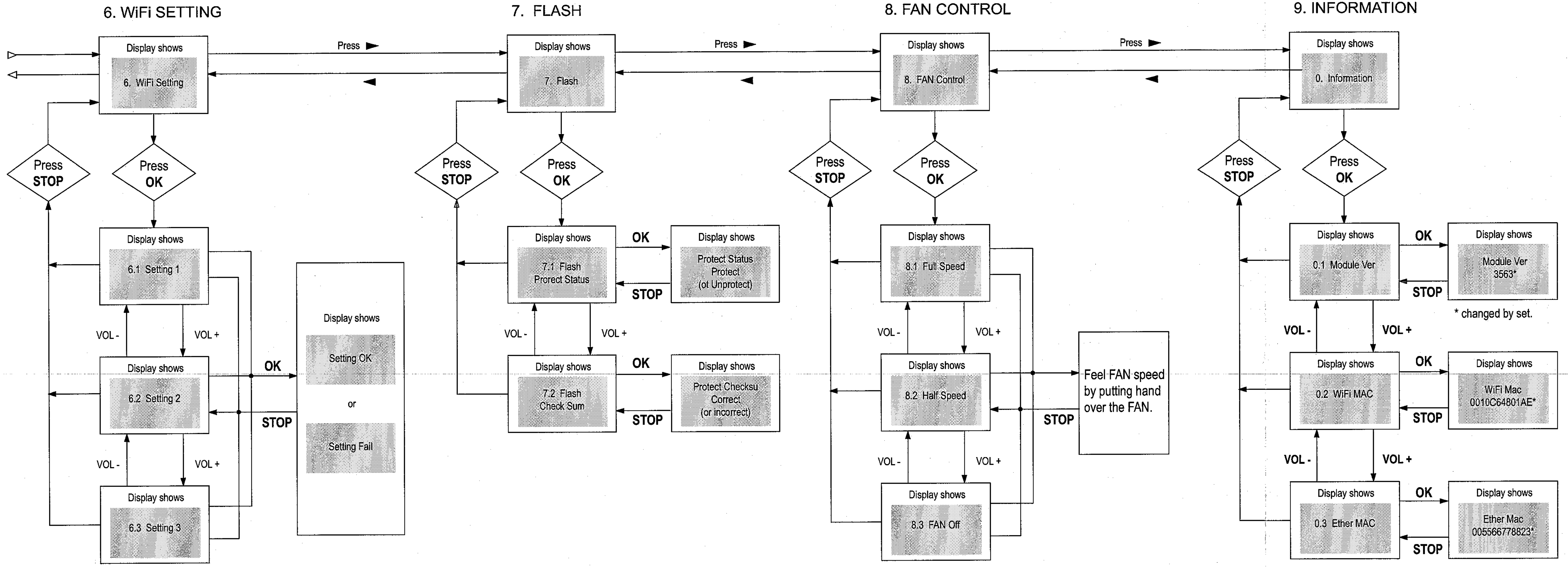

To enter Service mode, keep **OK** and **VOLUME UP** keys depressed while pligging mains cord in.
Display shows
Welcome to FSM
Ver: x.x
Ver: x.x represents FSM version.
Example : Ver: 4.6
Press OK
1. HW TEST
2. LCD TEST
3. KEY TEST
Not for WAS700
4. CD TEST
5. EEPROM TEST
Press ►
◄
Display shows
1. HW Test
2. LCD Test
3. Key Test
4. CD Test
5. EEPROM
Press OK
Press STOP
HW Result
111111
VOL -
VOL +
Philips
Philips
Philips
Philips
3.1 Keypad Test
Press VOL +
VOL -
3.2 RC6 Test
Test all keys on Panel (display shows key name)
Test all keys on remote control (display shows key name)
Key Test OK (or fail)
RC6 Test OK (or fail)
Press STOP twice
CD Testing
CD Focus
0 (1, 2, 3 or 4)
Press **EJECT** to eject CD.
CD will automatic load if inserted.
5.1 EEPROM Reset
5.2 EEPROM Clear
5.3 EEPROM Test
OK
STOP
EEPROM xxxx OK
or
EEPROM xxxx Fail

1. HW Test
Digit represents (from left to right)
SAA7750
SAA7752
CD10
EPLD
Ethernet controller
WiFi card

1 = pass
0 = fail

SERVICE TEST PROGRAM

To exit Service Test Mode, power the set.


6. WiFi SETTING
7. FLASH
8. FAN CONTROL
9. INFORMATION
Press
Display shows
6. WiFi Setting
Press STOP
Press OK
6.1 Setting 1
6.2 Setting 2
6.3 Setting 3
VOL -
VOL +
OK
STOP
Setting OK
or
Setting Fail
7. Flash
7.1 Flash Prorect Status
7.2 Flash Check Sum
Protect Status Protect (ot Unprotect)
Protect Checksu Correct (or incorrect)
8. FAN Control
8.1 Full Speed
8.2 Half Speed
8.3 FAN Off
Feel FAN speed by putting hand over the FAN.
0. Information
0.1 Module Ver
0.2 WiFi MAC
0.3 Ether MAC
Module Ver 3563*
WiFi Mac 0010C64801AE*
Ether Mac 005566778823*
* changed by set.

Note: For WAS700 only 0.1 Module and 0.2 WiFi Mac can be selected.

SOFTWARE UPGRADING PROCEDURE

Software Version Verification Procedure
It is important to write down the system version information of your Center before you start the upgrade procedure. This information is also useful in case you need to call Philips Customer Care Center.

1. Press **MENU**.
2. Press ▲/▼ to select "**Information**". Press **OK**.
3. Press ▲/▼ to select "**System**". Press **OK**.
4. The software version number is shown on the display.
5. If the software version is not the latest one, you need to upgrade waCS700.

There are 2 ways to update the software.

A) Using CD-Rom
B) Using DMM

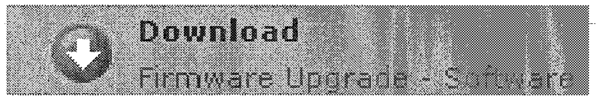
A. Using CD-Rom

1. Software Upgrade Disc Preparation

Tools Required : You will need the following items :
- PC (Pentium III 300MHz processor or higher)
- CD-R/RW writer and writing application software
- Blank CD-R or CDRW disc
- Broadband / High speed internet connection

2. How to download the software to your computer

1. Click the link to save the software on your computer.



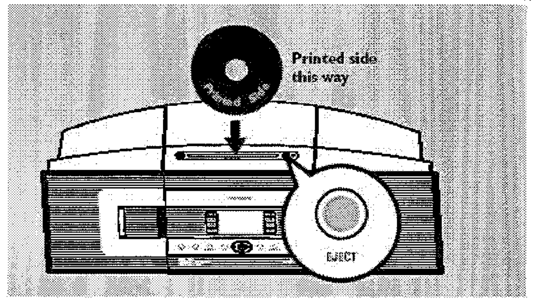
Download
Firmware Upgrade - Software

2. Unzip the .zip file and extract files into your PC.

Note:
- *Please do not rename the filename.*
- *If you do not have the software to open the .zip file, please visit below website to download the software.*
  http://www.winzip.com/

3. Steps to upgrade the waCS700

1. Make sure the Audio Station has connected to the Audio Center.
2. Burn the file to blank CD-R or CDRW. Finalize the disc. (The application may do this automatically.)
3. Turn on the Audio Center and turn off the Audio Station, insert the CD to the slot loader, CD graphic printed side facing you.



4. The Audio Center will upgrade automatically.
   - The message "**Updating firmware, please wait.....**" and the "**process bar**" show on the display of the Audio Center.
   - The upgrade process of the Center will reboot twice

Note: Do NOT power off the Audio Center or eject the disc at this stage.

5. It takes around 5 mins to complete the firmware upgrade for the Audio Center.
6. When done, the Audio Center will go to the HD mode automatically. Turn on the Audio Station (paired earlier), the Audio Center will upgrade the Station wireless automatically.
7. It takes around 5 mins to complete the firmware upgrade for the Auido Station.
   - The message "**Updating firmware, please wait.....**" and the "**process bar**" show on the display of the Audio Station.
   - The upgrade process of the Audio Station will reboot twice

Note: Do NOT power off the Audio Station at this stage.

8. When done, the Audio Station will go to the HD mode. You can start the normal operations afterward.

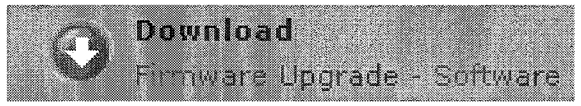
3. After the upgrade

Do confirm the software version by checking the system version.
Please follow the procedure described in the section "**Software Version Verification Procedures**".

B. Using DMM

1. How to download the software to your computer

1. Click the link to save the software on your computer.



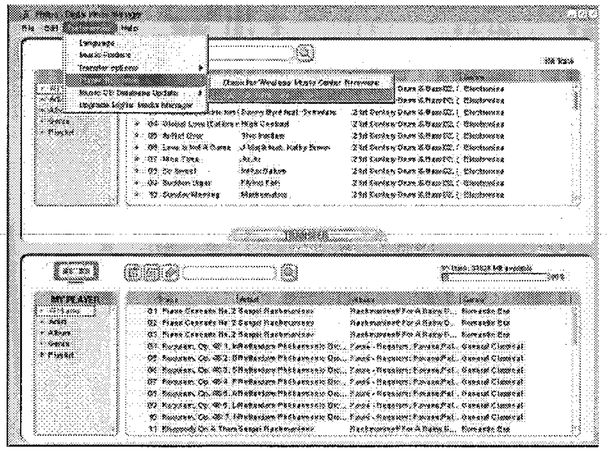
Download
Firmware Upgrade - Software

2. Unzip the .zip file and extract files into your PC.

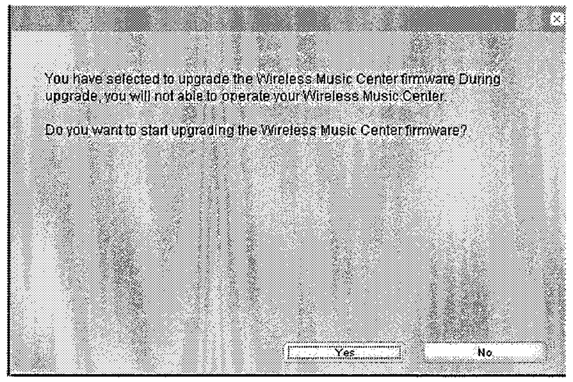
Note:
- *Please do not rename the filename.*
- *If you do not have the software to open the .zip file, please visit below website to download the software.*
  http://www.winzip.com/

2. Steps to update waCS700

1. Launch the DMM
2. Select **Preference → Player Firmware → Upgrade Firmware.**



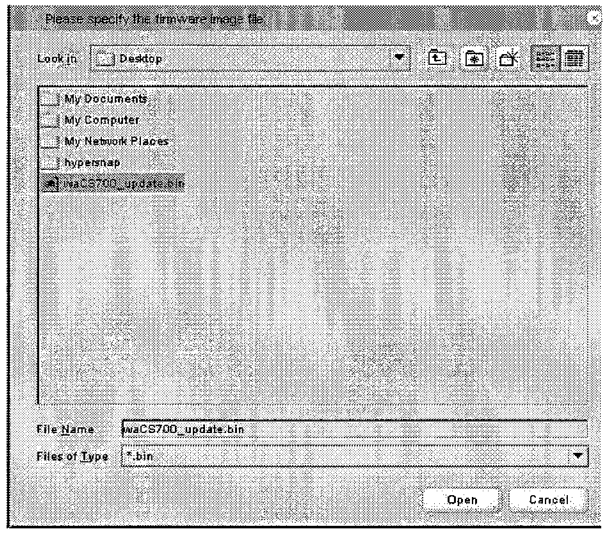
3. Click **Yes** to start the process.



You have selected to upgrade the Wireless Music Center firmware During upgrade, you will not able to operate your Wireless Music Center.

Do you want to start upgrading the Wireless Music Center firmware?

4. Find the file where you stored in the PC and then click "Open"



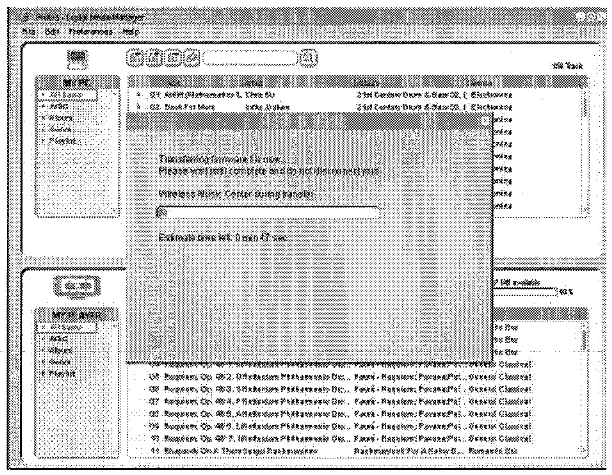
Please specify the firmware image file

Look in: Desktop

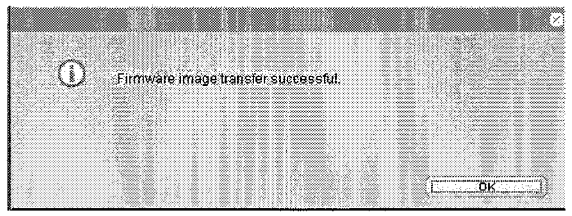
File Name: waCS700_update.bin

Files of Type: *.bin

5. The file is starting to transfer to the Audio Center.



6. After the firmware file is transferred to the Audio Center successfully, the Audio Center starts upgrade the Audio Center automatically.



Firmware image transfer successful.

- The message "**Updating firmware, please wait.....**" and the "**process bar**" show on the display of the Audio Center.
- The upgrade process of the Center will reboot twice

Note: Do NOT power off the Audio Center at this stage.

SOFTWARE UPGRADING PROCEDURE

7. It takes around 5 mins to complete the firmware upgrade for the Audio Center.

8. When done, the Audio Center will go to the HD mode automatically. Turn on the Audio Station (paired earlier), the Audio Center will upgrade the Station wireless automatically.

9. It takes around 5 mins to complete the firmware upgrade for the Audio Station.
   - The message "**Updating firmware, please wait.....**" and the "**process bar**" show on the display of the Audio Station.
   - The upgrade process of the Audio Station will reboot twice

Note: Do NOT power off the Audio Station at this stage.

10. When done, the Audio Station will go to the HD mode. You can start the normal operations afterward.

4. After the upgrade

Do confirm the software version by checking the system version.
Please follow the procedure described in the section "**Software Version Verification Procedures**".

CD DATABASE UPGRADING PROCEDURE

The CD Database is provided quarterly on the internet. There are 2 ways to update the embedded CDDB.

A) Using CD-Rom
B) Using DMM

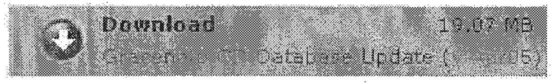
A. Using CD-Rom

1. CDDB Update Disc Preparation

Tools Required : You will need the following items :
- PC (Pentium III 300MHz processor or higher)
- CD-R/RW writer and writing application software
- Blank CD-R or CDRW disc
- Broadband / High speed internet connection

2. How to download the CDDB to your computer

1. Click the link to save the CDDB on your computer.



2. Unzip the .zip file and extract files into your PC.

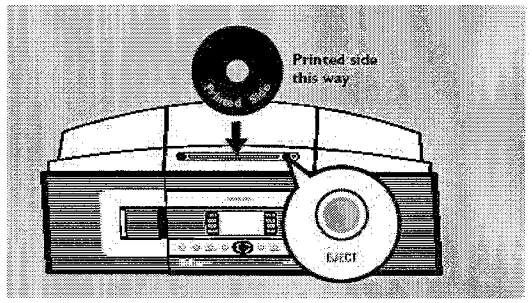
Note:
- *Please do not rename the filename.*
- *If you do not have the software to open the .zip file, please visit below website to download the software.*
  http://www.winzip.com/

3. Steps to update the Gracenote CDDB

1. Burn the file to blank CD-R or CDRW. Finalize the disc. (The application may do this automatically.)

2. Turn on the Audio Center.

3. Insert CD into Audio Center's CD loader, with CD graphic printed side facing you.



4. The Audio Center starts update the Audio's embedded CDDB automatically. The message "Updating the
   Gracenote database" (depends on the language setting on the set) is shown on the display.

Note: Do NOT power off the Audio Center or eject the disc at this stage.

5. It takes around 15-20 mins to complete CDDB updating.

6. If the CDDB is updated successfully, the message
   "Update Finished. Eject Disc" (depends on the language setting on the set) shows.

Note: If the message "Update Aborted. Eject Disc" shows, the CDDB file you downloaded maybe corrupted. Please download the zip file and burn the CD again.

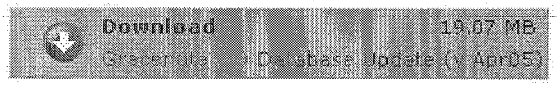
7. Press eject button and then take out the disc.

8. You can start the normal operation afterward.

B. Using DMM

1. How to download the CDDB to your computer

1. Click the link to save the CDDB on your computer.



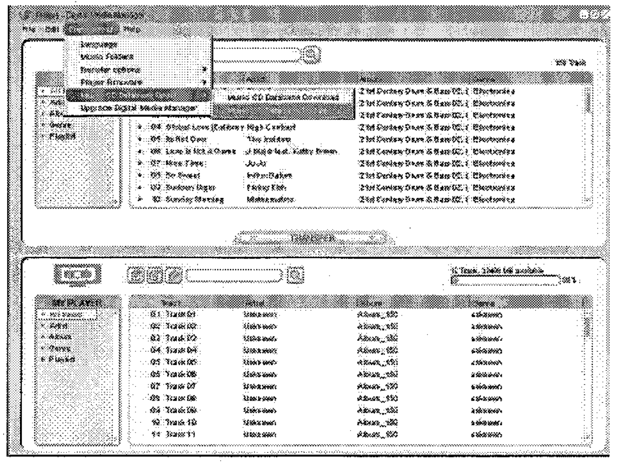
2. Unzip the .zip file and extract files into your PC.

Note:
- *Please do not rename the filename.*
- *If you do not have the software to open the .zip file, please visit below website to download the software.*
  http://www.winzip.com/

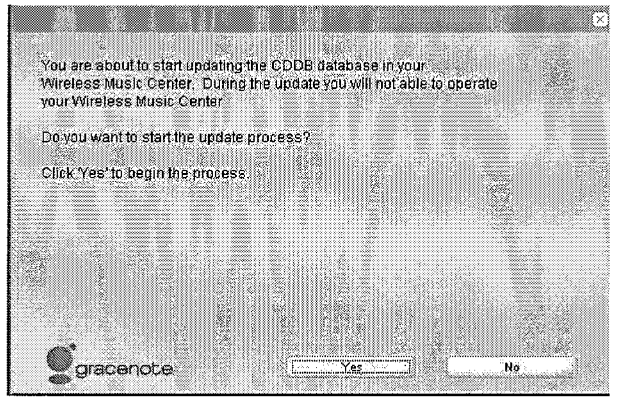
2. Steps to update the Gracenote CDDB

1. Launch the DMM

2. Select **Preference → Music CD Database Update → Music CD Database Update**.



3. Click Yes to start the process.

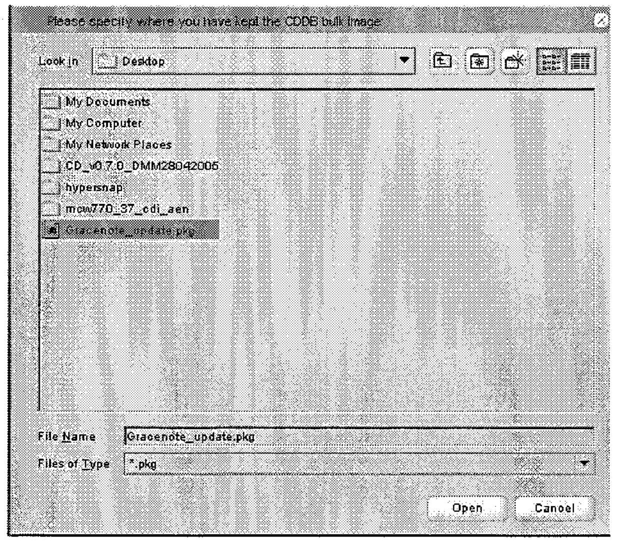


You are about to start updating the CDDB database in your Wireless Music Center. During the update you will not able to operate your Wireless Music Center

Do you want to start the update process?

Click 'Yes' to begin the process.

4. Find the file where you stored in the PC and then click Open.



Please specify where you have kept the CDDB bulk image

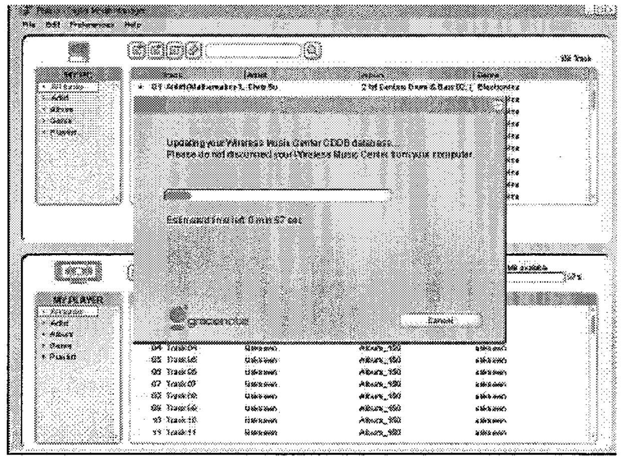
Look in: Desktop

My Documents
My Computer
My Network Places
CD_v0.7.0_DMM28042005
hypersnap
mcw770_37_cdi_aen
Gracenote_update.pkg

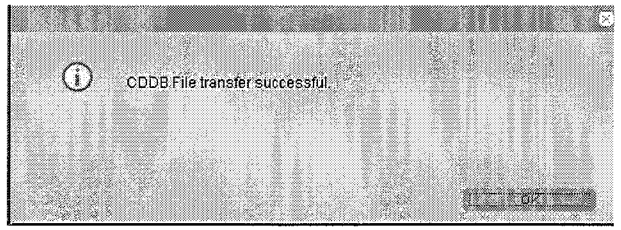
File Name: Gracenote_update.pkg

Files of Type: *.pkg

5. The file is starting to transfer to the Audio Center.



6. After the CDDB file is transferred to the Audio Center successfully, the Audio Center starts update the Audio Center's embedded CDDB automatically.



CDDB File transfer successful.

The message "**Updating the Gracenote database**" (depends on the language setting on the set) is shown on the display.

Note: Do NOT power off the Audio Center at this stage.

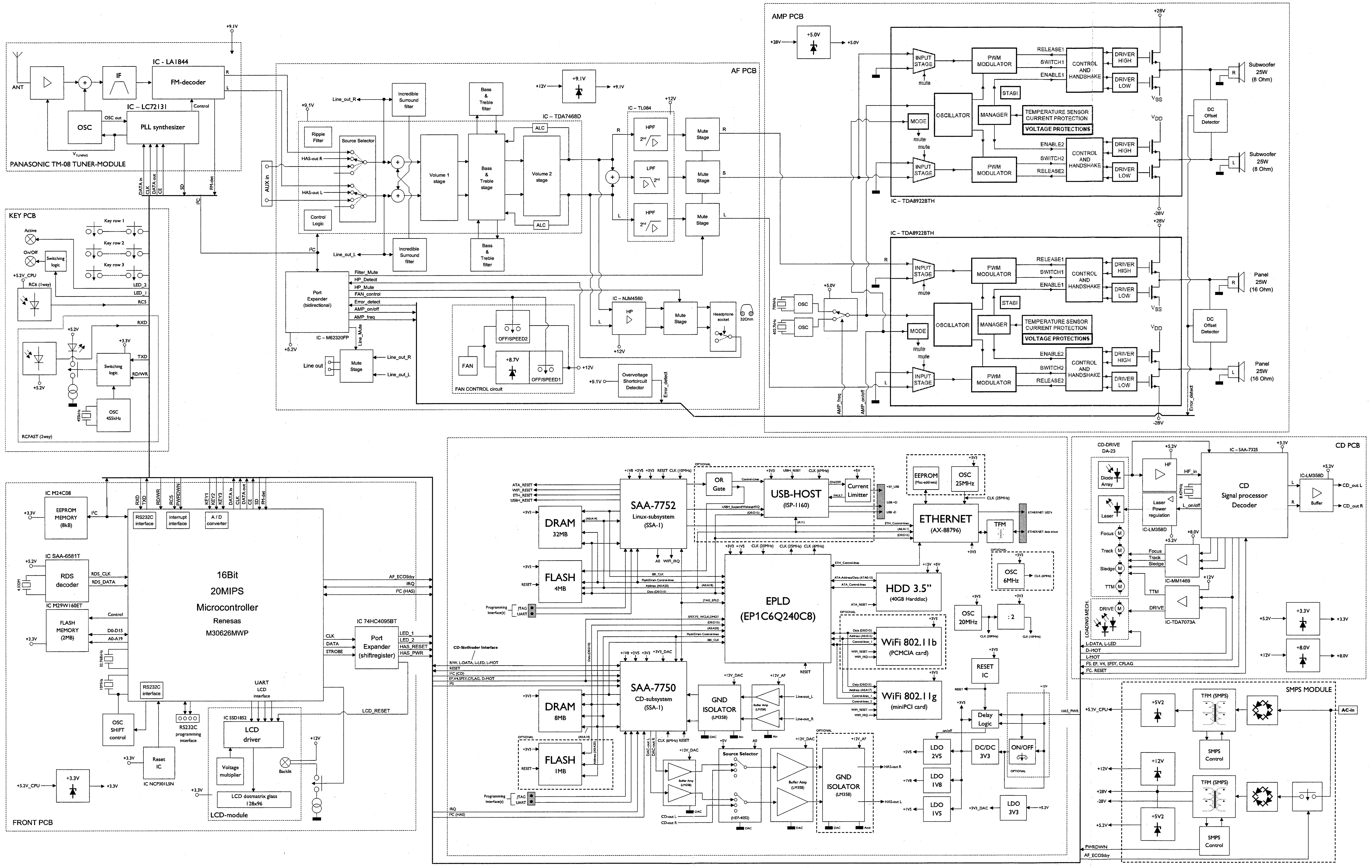
7. It takes around 15-20 mins to complete CDDB updating.

8. If the CDDB is updated successfully, the message "**Update Finished**" (depends on the language setting on the set) shows.

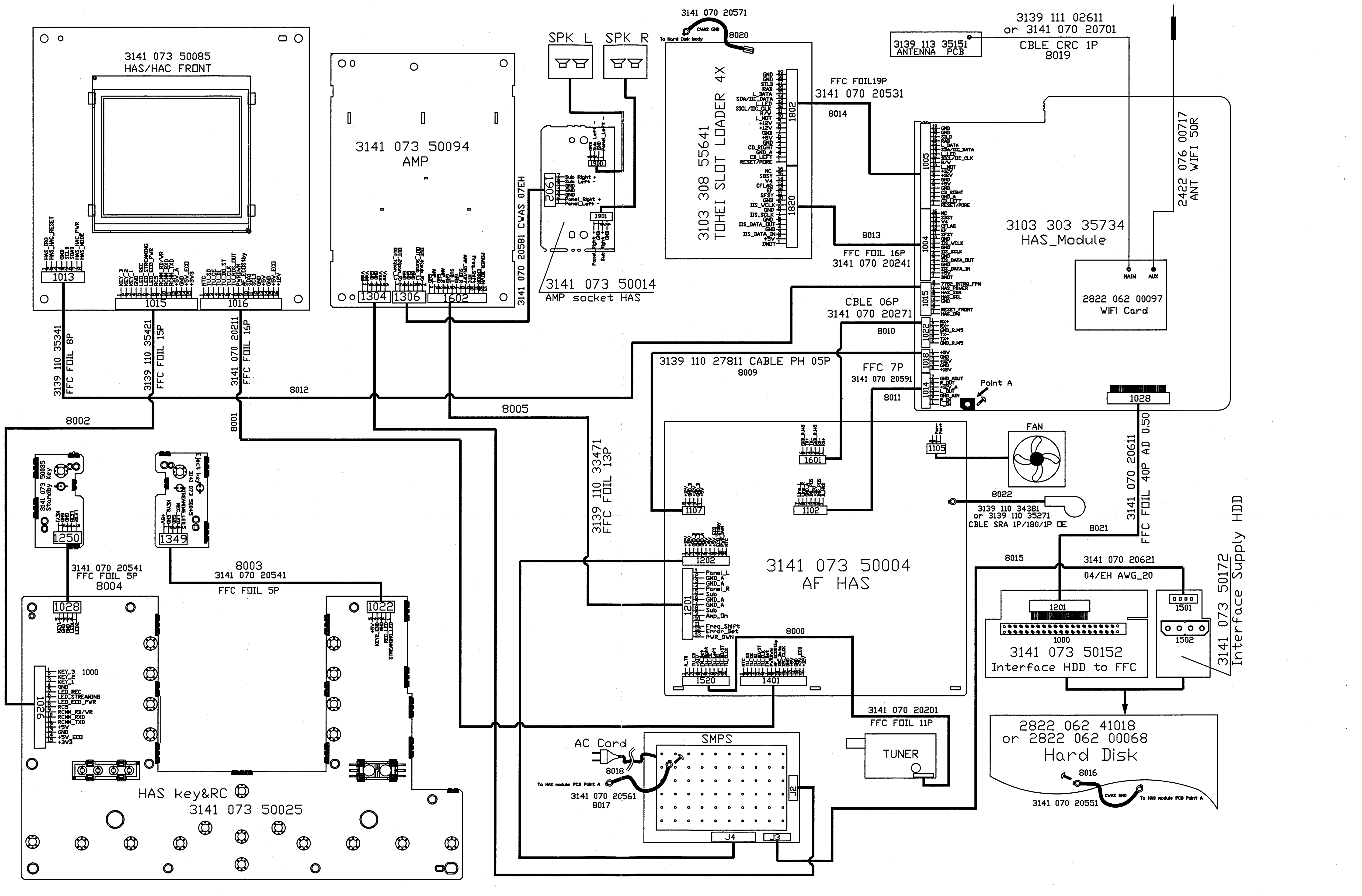
Note: If the message "**Update Aborted**" shows, the CDDB file you downloaded maybe corrupted. Please download the zip file again.

9. You can start the normal operation afterward.

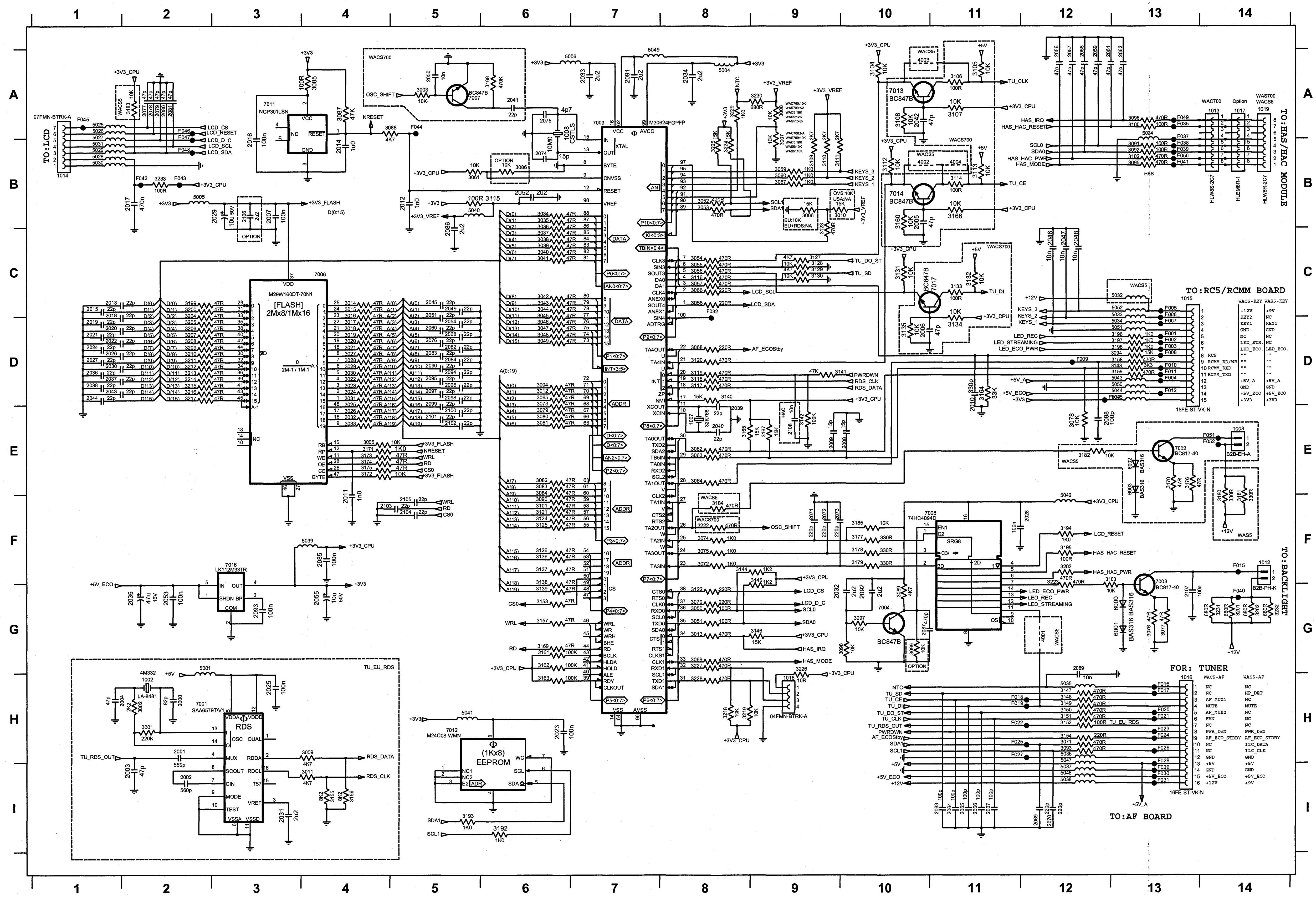
SET BLOCK DIAGRAM


PANASONIC TM-08 TUNER-MODULE
ANT
IF
OSC
IC - LA1844
FM-decoder
IC - LC72131
PLL synthesizer
AF PCB
Incredible Surround filter
Bass & Treble filter
IC - TDA7468D
Source Selector
Ripple Filter
Control Logic
Volume 1 stage
Volume 2 stage
ALC
IC - TL084
HPF
LPF
Mute Stage
AUX in
Port Expander (bidirectional)
IC - M62320FP
Line out
IC - NJM4560
Headphone socket
32Ohm
FAN CONTROL circuit
FAN
OFF/SPEED1
OFF/SPEED2
Overvoltage Shortcircuit Detector
Error_detect
KEY PCB
Key row 1
Key row 2
Key row 3
Switching logic
OSC 455kHz
RCFAST (2way)
AMP PCB
IC - TDA8922BTH
INPUT STAGE
PWM MODULATOR
CONTROL AND HANDSHAKE
DRIVER HIGH
DRIVER LOW
OSCILLATOR
MANAGER
TEMPERATURE SENSOR
CURRENT PROTECTION
VOLTAGE PROTECTIONS
STABI
MODE
DC Offset Detector
Subwoofer 25W (8 Ohm)
Panel 25W (16 Ohm)
FRONT PCB
IC M24C08
EEPROM MEMORY (8kB)
IC SAA-6581T
RDS decoder
IC M29W160ET
FLASH MEMORY (2MB)
RS232C interface
Interrupt interface
A / D converter
16Bit
20MIPS
Microcontroller
Renesas
M30626MWP
IC 74HC4095BT
Port Expander (shiftregister)
OSC SHIFT control
Reset IC
IC NCP301LSN
RS232C programming interface
IC SSD1852
LCD driver
Voltage multiplier
LCD dotmatrix glass 128x96
LCD-module
Backlit
SAA-7752
Linux-subsystem (SSA-1)
DRAM 32MB
FLASH 4MB
OR Gate
USB-HOST (ISP-1160)
Current Limitter
EEPROM (Mac-address)
OSC 25MHz
ETHERNET (AX-88796)
TFM
EPLD (EP1C6Q240C8)
HDD 3.5" (40GB Harddisc)
OSC 6MHz
OSC 20MHz
: 2
WiFi 802.11b (PCMCIA card)
WiFi 802.11g (miniPCI card)
RESET IC
Delay Logic
SAA-7750
CD-subsystem (SSA-1)
DRAM 8MB
FLASH 1MB
GND ISOLATOR (LM358)
Buffer Amp (LM358)
Source Selector (HEF-4052)
LDO 2V5
LDO 1V8
LDO 1V5
DC/DC 3V3
LDO 3V3
ON/OFF
CD PCB
CD-DRIVE DA-23
Diode Array
Laser
HF
Laser Power regulation
IC-LM358D
IC - SAA-7325
CD Signal processor Decoder
Buffer
CD_out L
CD_out R
Focus
Track
Sledge
TTM
IC-MM1469
DRIVE
IC-TDA7073A
LOADING MECH.
SMPS MODULE
AC-in
TFM (SMPS)
SMPS Control
+5V2
+12V
+3.3V
+8.0V

SET WIRING DIAGRAM


3141 073 50085
HAS/HAC FRONT
1013
1015
1016
3139 110 35341 FFC FOIL 8P
3139 110 35421 FFC FOIL 15P
3141 070 20211 FFC FOIL 16P
8002
8001
8012
3141 073 50094
AMP
1304
1306
1602
3141 070 20581 CWAS 07EH
SPK L
SPK R
1902
1900
1901
3141 073 50014
AMP socket HAS
8005
3139 110 33471 FFC FOIL 13P
3141 070 20571
8020
To Hard Disk body
3103 308 55641
TOHEI SLOT LOADER 4X
1802
1820
FFC FOIL19P
3141 070 20531
8014
8013
FFC FOIL 16P
3141 070 20241
3139 111 02611
or 3141 070 20701
CBLE CRC 1P
8019
3139 113 35151
ANTENNA PCB
2422 076 00717
ANT WIFI 50R
3103 303 35734
HAS_Module
1005
1004
1015
1022
1018
1014
1028
2822 062 00097
WIFI Card
MAIN
AUX
CBLE 06P
3141 070 20271
8010
3139 110 27811 CABLE PH 05P
8009
FFC 7P
3141 070 20591
8011
Point A
FAN
1105
1601
1107
1102
8022
3139 110 34381
or 3139 110 35271
CBLE SRA 1P/180/1P DE
3141 073 50004
AF HAS
1202
1201
1520
1401
8000
3141 070 20611 FFC FOIL 40P AD 0.50
8021
8015
3141 070 20621
04/EH AWG_20
1201
1000
3141 073 50152
Interface HDD to FFC
1501
1502
3141 073 50172
Interface Supply HDD
2822 062 41018
or 2822 062 00068
Hard Disk
8016
3141 070 20551
To HAS module PCB Point A
3141 073 50035
Standby Key
1250
3141 073 50045
Eject key
1349
3141 070 20541
FFC FOIL 5P
8004
8003
3141 070 20541
FFC FOIL 5P
1028
1022
1026
1000
HAS key&RC
3141 073 50025
AC Cord
8018
To HAS module PCB Point A
3141 070 20561
8017
SMPS
J2
J3
J4
3141 070 20201
FFC FOIL 11P
TUNER

FRONT BOARD - Circuit Diagram


TO:LCD
07FMN-BTRK-A
1014
LCD_CS
LCD_RESET
LCD_D_C
LCD_SCL
LCD_SDA
7011
NCP301LSN
RESET
NRESET
WACS700
OSC_SHIFT
7007
BC847B
7009
M30624FGPFP
VCC
AVCC
XTAL
CNVSS
BYTE
RESET
VREF
KEYS_3
KEYS_2
KEYS_1
SCL1
SDA1
7006
M29W160DT-70N1
[FLASH]
2Mx8/1Mx16
DATA
ADDR
7016
LK112M33TR
+5V_ECO
+3V3
+3V3_FLASH
+3V3_CPU
+3V3_VREF
TU_EU_RDS
4M332
7001
SAA6579T/V1
RDS
RDS_DATA
RDS_CLK
TU_RDS_OUT
7012
M24C08-WMN
(1Kx8)
EEPROM
SDA1
SCL1
04FMN-BTRK-A
7013
BC847B
7014
BC847B
TU_CLK
TU_CE
7017
BC847B
TU_DI
TU_DO_ST
TU_SD
AF_ECOStby
PWRDWN
RDS_CLK
RDS_DATA
OSC_SHIFT
7008
74HC4094D
SRG8
LCD_RESET
HAS_HAC_RESET
HAS_HAC_PWR
LED_ECO_PWR
LED_REC
LED_STREAMING
7004
BC847B
HAS_IRQ
HAS_MODE
LCD_CS
LCD_D_C
SCL0
SDA0
TO:HAS/HAC MODULE
WAC700
Option
WAS700
WACS5
HAS
HLW8S-2C7
HLEM8R-1
HLW8R-2C7
TO:RC5/RCMM BOARD
1015
15FE-ST-VK-N
WACS-KEY
WAS5-KEY
7002
BC817-40
B2B-EH-A
WAS5
TO:BACKLIGHT
7003
BC817-40
B2B-PH-K
FOR: TUNER
1016
16FE-ST-VK-N
TO:AF BOARD
1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I

1002	H2
1003	E14
1007	E8
1008	A6
1012	F14
1013	A14
1014	B1
1015	C13
1016	H13
1017	A14
1018	H9
1019	A14
2000	H2
2001	H2
2002	I2
2003	I2
2004	H1
2005	B10
2006	D10
2007	B3
2008	E10
2009	E9
2010	D11
2011	F4
2012	B5
2013	C1
2014	B4
2015	C1
2016	B3
2017	B2
2018	C1
2019	D1
2020	D1
2021	D1
2022	D1
2023	H6
2024	D1
2025	H3
2026	D1
2027	D1
2028	F12
2029	B3
2030	D1
2031	I3
2032	G9
2033	A7
2034	A8
2035	G2
2036	D1
2037	D1
2038	D1
2039	E8
2040	E8
2041	A6
2042	A10
2043	D1
2044	D1
2045	C5
2046	C12
2047	C12
2048	C12
2049	C5
2050	A5
2051	C5
2052	B6
2053	G2
2054	D5
2055	G4
2056	A12
2057	A12
2058	A12
2059	A12
2060	D5
2061	A12
2062	A13
2063	I11
2064	I11
2065	I11
2066	I11
2067	I11
2068	D5
2069	I12
2070	I12
2071	F9
2072	F9
2073	F9
2074	B6
2075	A6
2076	D5
2077	A2
2078	A2
2079	A2
2080	A2
2081	A2
2082	D5
2083	D5
2084	D5
2085	F4
2086	C5
2087	G10
2088	E12
2089	G12
2090	D5
2091	A7
2092	G10
2093	G3
2094	D5
2095	D5
2096	D5
2097	D5
2098	D5
2099	D5
2100	E5
2101	E5
2102	E5
2103	F4
2104	F5
2105	F5
2106	B3
2107	G13
2108	E9
3001	H2
3002	H2
3003	A5
3004	D6
3005	E4
3006	B9
3007	B9
3008	A9
3009	H4
3010	B9
3011	I4
3012	D6
3013	G8
3014	C4
3015	C4
3016	D4
3017	D4
3018	D4
3019	D4
3020	D4
3021	D4
3022	D4
3023	D4
3024	D4
3025	E4
3026	E4
3027	D4
3028	D4
3029	D4
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3034	B6
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3050	G8
3051	G8
3052	B8
3053	B8
3054	C8
3055	C8
3056	C8
3057	C8
3058	C8
3059	B9
3060	B9
3061	B5
3062	E8
3063	E8
3064	E8
3065	D6
3066	C8
3067	B9
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3076	G13
3077	G13
3078	E12
3079	E6
3080	E6
3081	E6
3082	E6
3083	E6
3084	E6
3085	A4
3086	B6
3087	A4
3088	A5
3089	G10
3090	F6
3091	B13
3092	B13
3093	H12
3094	D13
3095	B13
3096	A13
3097	G10
3098	G10
3099	G10
3100	A13
3101	F6
3102	B13
3103	F12
3104	A10
3105	A11
3106	A11
3107	A11
3108	A10
3109	B9
3110	B9
3111	B9
3112	B10
3113	B11
3114	B11
3115	B6
3116	C8
3117	D8
3118	D8
3119	D8
3120	D8
3121	F6
3122	G8
3123	C9
3124	F6
3125	F6
3126	F6
3127	C9
3128	C9
3129	C9
3130	C9
3131	C10
3132	C11
3133	C11
3134	D11
3135	D10
3136	F6
3137	F6
3138	F6
3139	G6
3140	D8
3141	D10
3142	E9
3143	D13
3144	F8
3145	F9
3146	G9
3147	H12
3148	H12
3149	H12
3150	H12
3151	H12
3152	H12
3153	G6
3154	H12
3155	I4
3156	I4
3157	G6
3158	D13
3159	D13
3160	B10
3161	G6
3162	G6
3163	H6
3164	D11
3165	E8
3166	B11
3167	E9
3168	A6
3169	G6
3170	E13
3171	E4
3172	E4
3173	E4
3174	E4
3175	E4
3176	E13
3177	F10
3178	F10
3179	F10
3180	E14
3181	E14
3182	E12
3183	A2
3184	F8
3185	F10
3192	I6
3193	I5
3194	F12
3195	F12
3196	D13
3197	D13
3198	D13
3199	C2
3200	C2
3201	G14
3202	G14
3203	F12
3204	D2
3205	D2
3206	D2
3207	D2
3208	D2
3209	D2
3210	D2
3211	D2
3212	D2
3213	D2
3214	D2
3215	D2
3216	D2
3217	D2
3218	H8
3219	H8
3222	F8
3223	F12
3224	B8
3225	B8
3226	G9
3227	G8
3228	H8
3229	A8
3230	A9
3231	G14
3232	G14
3233	B2
4001	G12
4002	B10
4003	A10
5001	G2
5004	A8
5005	B2
5006	A6
5024	A13
5025	A1
5026	A1
5027	A1
5028	B1
5029	B1
5030	B1
5031	B1
5032	C13
5033	C13
5034	D13
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5037	I12
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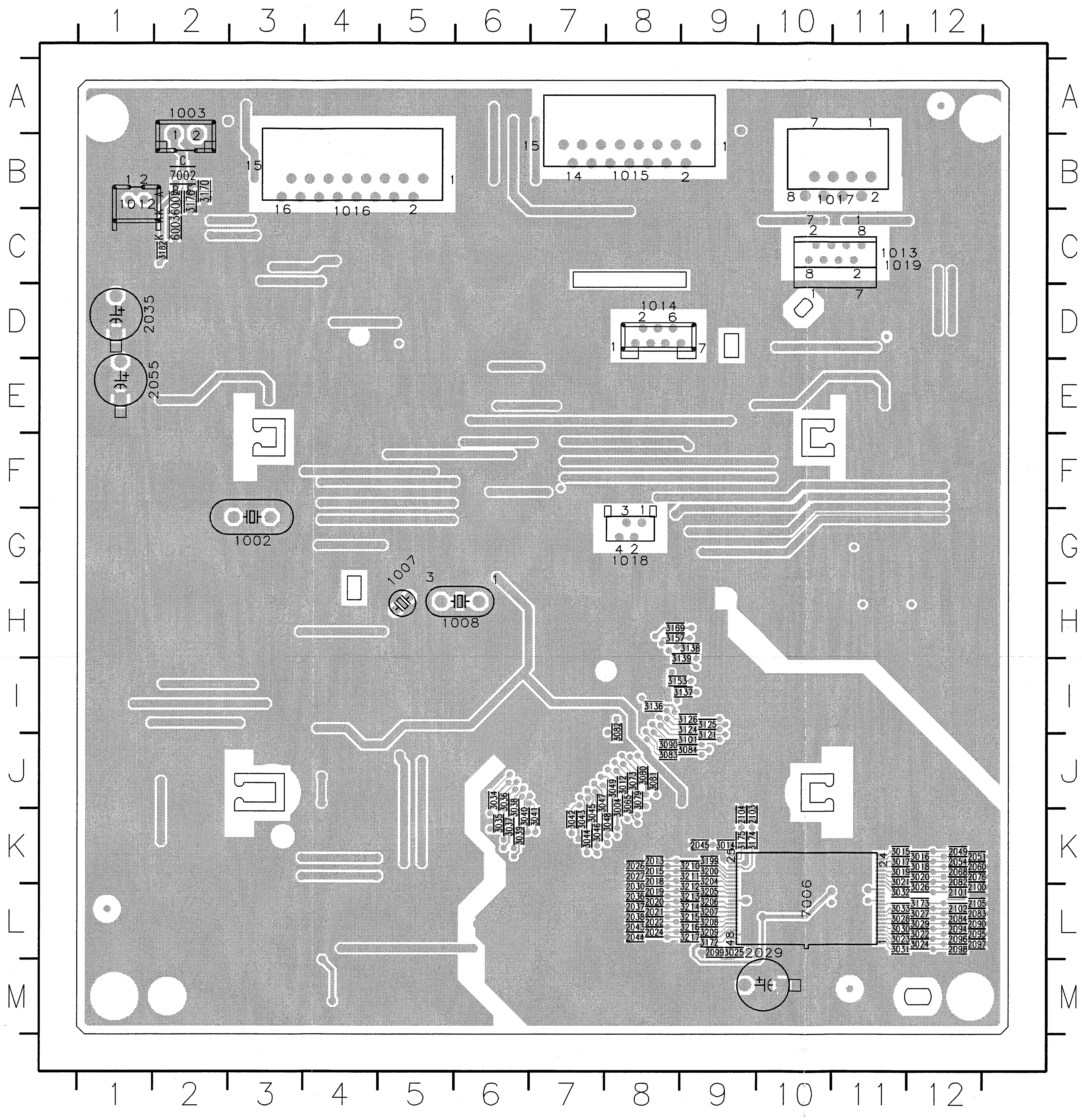
5044	D13
5045	D13
5046	I12
5047	H12
5049	A7
5050	D13
5051	D13
5052	C13
6000	G13
6001	G13
6002	E13
6003	E13
7001	H2
7002	E13
7003	F13
7004	G10
7006	C4
7007	A5
7008	F11
7009	A7
7011	A3
7012	H5
7013	A10
7014	B10
7016	F3
7017	C10
F001	D13
F002	D13
F003	D13
F004	D13
F005	C13
F006	C13
F007	D13
F008	D13
F009	D12
F010	D13
F011	D13
F012	D13
F013	D13
F015	F14
F016	H13
F017	H13
F018	H11
F019	H11
F020	H13
F021	H13
F022	H11
F023	H13
F024	H13
F025	H11
F026	H13
F027	H11
F028	H13
F029	I13
F030	I13
F031	I13
F032	C8
F035	A13
F037	A13
F038	B13
F039	B13
F040	G14
F041	B13
F042	B2
F043	B2
F044	A5
F045	A1
F046	A2
F047	A2
F048	B2
F049	A13
F050	B13
F051	E13
F052	E13

FRONT BOARD - Layout Diagram (side A)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A
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C
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E
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J
K
L
M
1003
1012
7002
6003
6002
3176
3170
3182
1016
1015
1017
1013
1019
1014
1018
1002
1007
1008
2035
2055
7006
2029
3169
3157
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3121
3101
3090
3083
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3014
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2103
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3173
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2082
2100
2101
2102
2105
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2095
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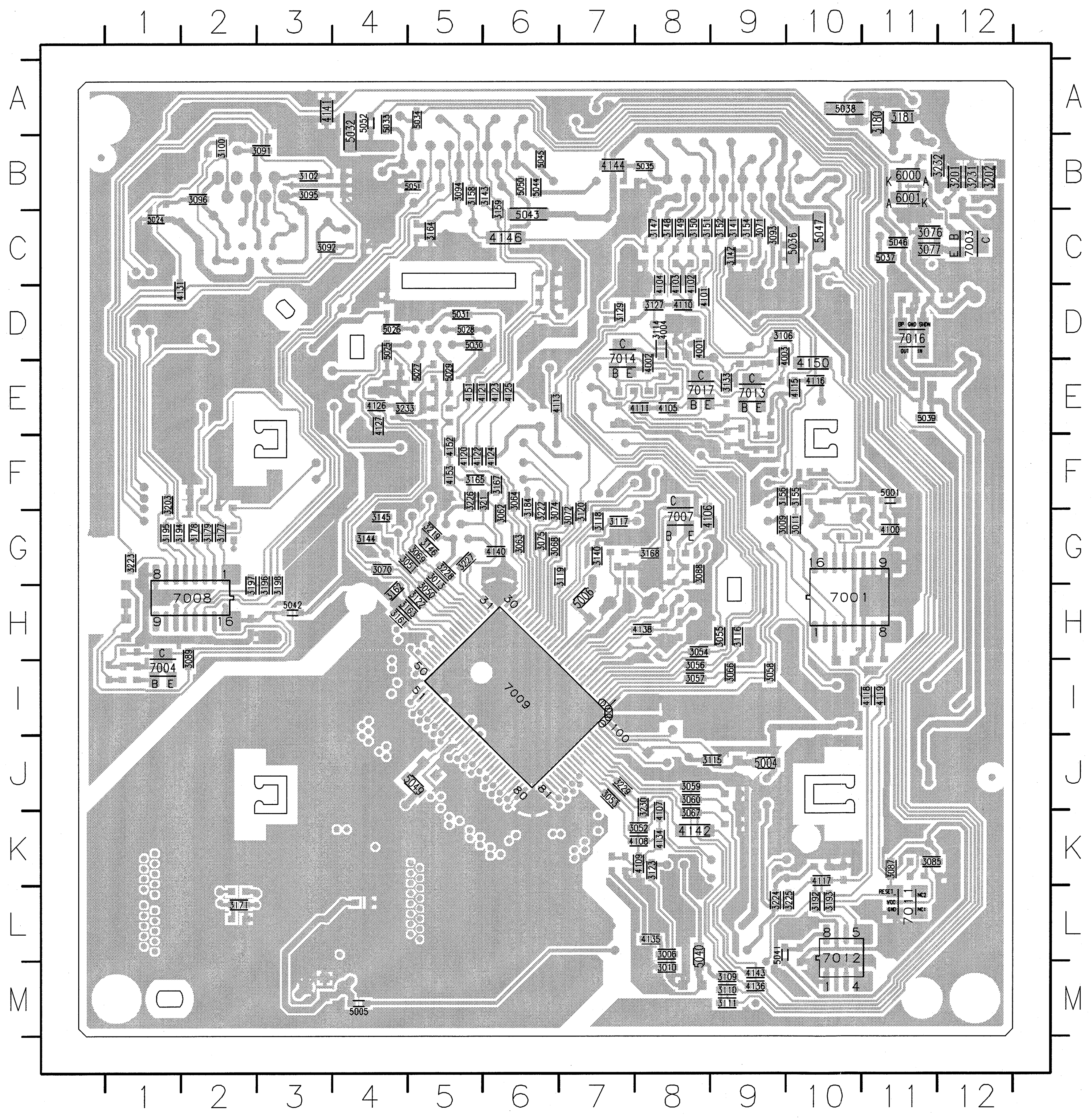
2037
2038
2043
2044
2013
2015
2018
2019
2020
2021
2022
2024
3172

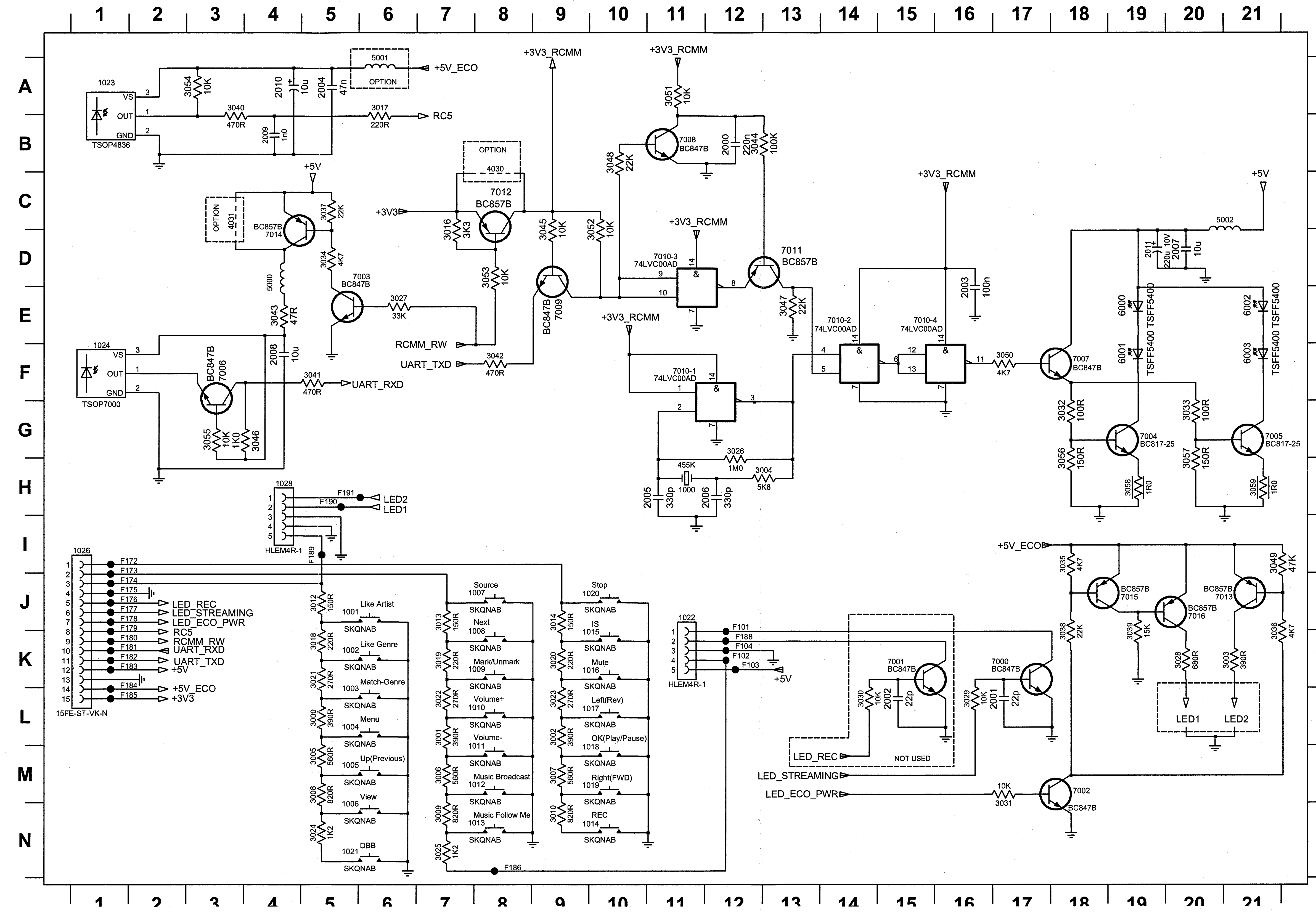
1002	G3
1003	A2
1007	G5
1008	H6
1012	B1
1013	C11
1014	D8
1015	B8
1016	C4
1017	B11
1018	G8
1019	C11
2013	K8
2015	K8
2018	K8
2019	L8
2020	L8
2021	L8
2022	L8
2024	L8
2026	K8
2027	K8
2029	L10
2030	L8
2035	D1
2036	L8
2037	L8
2038	L8
2043	L8
2044	L8
2045	K9
2049	K12
2051	K12
2054	K12
2055	E2
2060	K12
2068	K12
2076	K12
2082	K12
2083	L12
2084	L12
2090	L12
2094	L12
2095	L12
2096	L12
2097	L12
2098	L12
2099	L9
2100	L12
2101	L12
2102	L12
2103	K9
2104	K9
2105	L12
3004	J8
3012	J8
3014	K9
3015	K11
3016	K12
3017	K11
3018	K12
3019	K11
3020	K12
3021	K11
3022	L12
3023	L11
3024	L12
3025	L9
3026	L12
3027	L12
3028	L11
3029	L12
3030	L11
3031	L11
3032	L11
3033	L11
3034	J6
3035	K6
3036	J6
3037	K6
3038	J6
3039	K6
3040	K6
3041	K7
3042	K7
3043	K7
3044	K7
3045	K7
3046	K7
3047	J7
3048	K8
3049	J8
3065	J8
3073	J8
3079	J8
3080	J8
3081	J8
3082	I8
3083	J8
3084	J9
3090	J8
3101	J9
3121	J9
3124	I9
3125	I9
3126	I9
3136	I8
3137	I9
3138	H9
3139	I9
3153	I8
3157	H8
3169	H8
3170	B2
3172	L9
3173	L12
3174	K9
3175	K9
3176	B2
3182	C2
3199	K9
3200	K9
3204	K9
3205	L9
3206	L9
3207	L9
3208	L9
3209	L9
3210	K9
3211	K9
3212	L9
3213	L9
3214	L9
3215	L9
3216	L9
3217	L9
6002	B2
6003	C2
7002	B2
7006	L10

FRONT BOARD - Layout Diagram (side B)



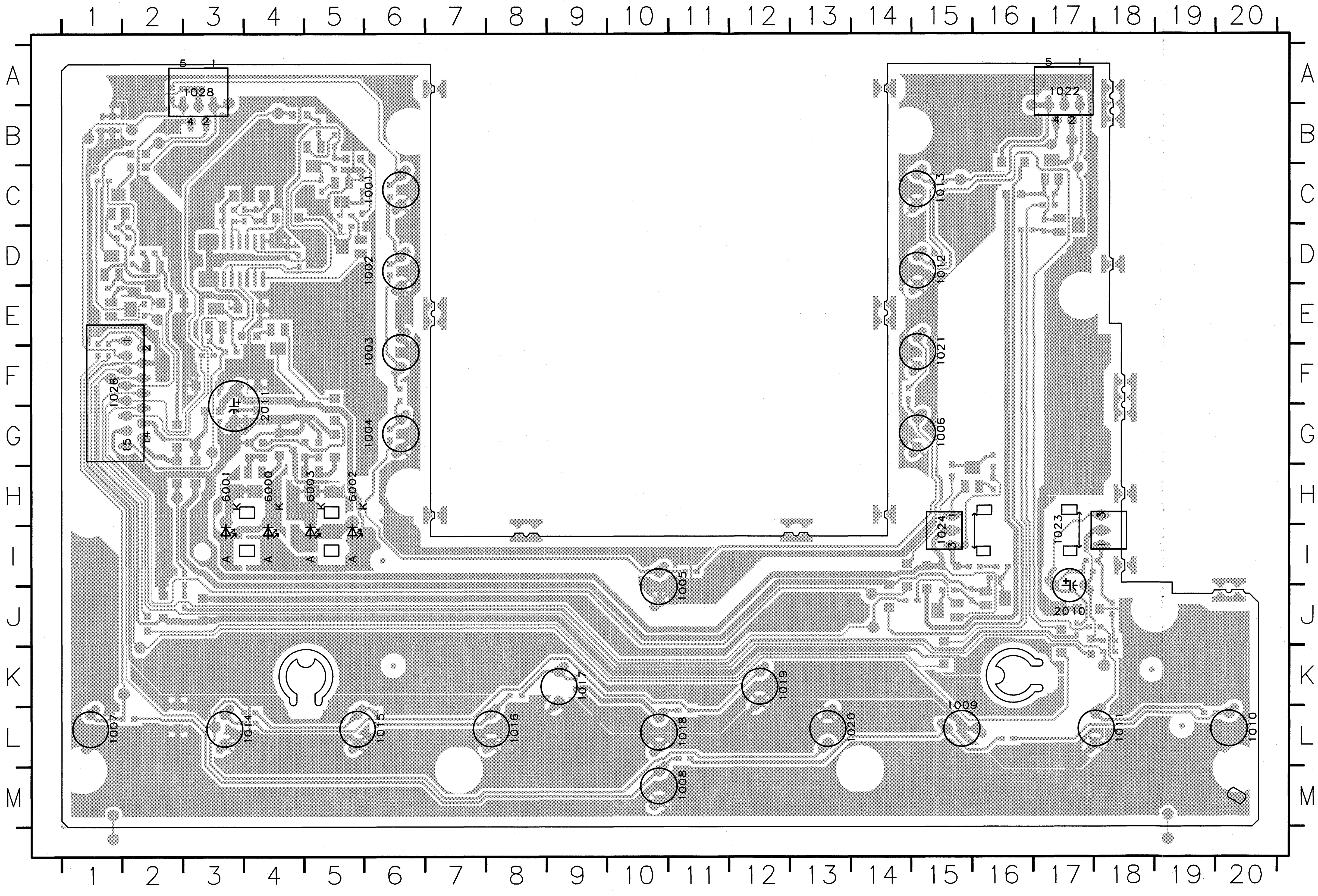
2000	F10	2092	H1	3106	D9	3192	L10	4143	M9
2001	F10	2093	D11	3107	E9	3193	L10	4144	B7
2002	H11	2106	M3	3108	F9	3194	G1	4146	C6
2003	F10	2107	C12	3109	M9	3195	G1	4150	E10
2004	F10	2108	C9	3110	M9	3196	H3	4151	E5
2005	E8	3001	G10	3111	M9	3197	H2	4152	F5
2006	F9	3002	G10	3112	E8	3198	H3	4153	F5
2007	L4	3003	G8	3113	D8	3201	B12	5001	F11
2008	D6	3005	L2	3114	D8	3202	B12	5004	J9
2009	C6	3006	L8	3115	J9	3203	F1	5005	M4
2010	C5	3007	K7	3116	H9	3218	F6	5006	H7
2011	L2	3008	K7	3117	G7	3219	G5	5024	C1
2012	G8	3009	G9	3118	G7	3222	G6	5025	D4
2014	K11	3010	M8	3119	G7	3223	G1	5026	D4
2016	K11	3011	G10	3120	G7	3224	L9	5027	E5
2017	E4	3013	G5	3122	H5	3225	L10	5028	D5
2023	L10	3050	H5	3123	K8	3226	F5	5029	E5
2025	G11	3051	G5	3127	D8	3227	G5	5030	D5
2028	H2	3052	K8	3128	D7	3228	G5	5031	D5
2031	I10	3053	J7	3129	D7	3229	J7	5032	A4
2032	H1	3054	H8	3130	D7	3230	J8	5033	A4
2033	H7	3055	H9	3131	E9	3231	B12	5034	A5
2034	J9	3056	I8	3132	E9	3232	B11	5035	B8
2039	H8	3057	I8	3133	E9	3233	E4	5036	C10
2040	H8	3058	I9	3134	E8	4001	D8	5037	C11
2041	G7	3059	J8	3135	F9	4002	E8	5038	A10
2042	F9	3060	J8	3140	G7	4003	D9	5039	E11
2046	K9	3061	H8	3141	C9	4004	D8	5040	L8
2047	J9	3062	G6	3142	C9	4100	G11	5041	L9
2048	J9	3063	G6	3143	B6	4101	D8	5042	H3
2050	G8	3064	F6	3144	G4	4102	C8	5043	C6
2052	J8	3066	I9	3145	G4	4103	C8	5044	B6
2053	D11	3067	K8	3146	G5	4104	C8	5045	B6
2056	B4	3068	G6	3147	C8	4105	E8	5046	C11
2057	B4	3069	G5	3148	C8	4106	G8	5047	C10
2058	C4	3070	G4	3149	C8	4107	K8	5049	J5
2059	B3	3071	C9	3150	C8	4108	K8	5050	B6
2061	B2	3072	G7	3151	C8	4109	K8	5051	B5
2062	B1	3074	G6	3152	C9	4110	D8	5052	A4
2063	C8	3075	G6	3154	C9	4111	E8	6000	B11
2064	C8	3076	C11	3155	F10	4113	E6	6001	B11
2065	C8	3077	C11	3156	F9	4115	E10	7001	H10
2066	C8	3078	D6	3158	B5	4116	E10	7003	C12
2067	C8	3085	K11	3159	B6	4117	K10	7004	I1
2069	K10	3086	H7	3160	E7	4118	I11	7007	G8
2070	K10	3087	K11	3161	H4	4119	I11	7008	H2
2071	F2	3088	G8	3162	H4	4120	F5	7009	I6
2072	F2	3089	H2	3163	H5	4121	E5	7011	L11
2073	F2	3091	B3	3164	C5	4122	F5	7012	L10
2074	G7	3092	C3	3165	F5	4123	E6	7013	E9
2075	G7	3093	C9	3166	E8	4124	F6	7014	D7
2077	E4	3094	B5	3167	F6	4125	E6	7016	D11
2078	D4	3095	B3	3168	G8	4126	E4	7017	E8
2079	E5	3096	B2	3171	L2	4127	E4		
2080	E5	3097	I1	3177	G2	4131	D1		
2081	E5	3098	I1	3178	G2	4134	K8		
2085	E11	3099	H1	3179	G2	4135	L8		
2086	M8	3100	B2	3180	A11	4136	M9		
2087	H1	3102	B3	3181	A11	4138	H8		
2088	D6	3103	B11	3183	E5	4140	G6		
2089	B7	3104	E9	3184	F6	4141	A3		
2091	J5	3105	D9	3185	G2	4142	K8		

KEY COMBINE PANEL - KEY & RC BOARD - Circuit Diagram


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
A B C D E F G H I J K L M N
1023
TSOP4836
VS
OUT
GND
3054 10K
3040 470R
2010 10u
2009 1n0
2004 47n
5001
OPTION
+5V_ECO
3017 220R
RC5
+5V
OPTION 4031
BC857B 7014
3037 22K
3034 4K7
5000
3043 47R
7003 BC847B
3027 33K
RCMM_RW
UART_TXD
3042 470R
OPTION
4030
7012 BC857B
+3V3
3016 3K3
3053 10K
+3V3_RCMM
3045 10K
3052 10K
BC847B 7009
1024
TSOP7000
BC847B 7006
2008 10u
3041 470R
UART_RXD
3055 10K
1K0
3046
3051 10K
7008 BC847B
3048 22K
2000 220n
3044 100K
7010-3 74LVC00AD
7011 BC857B
3047 22K
7010-1 74LVC00AD
3026 1M0
455K 1000
3004 5K6
2005 330p
2006 330p
2003 100n
7010-2 74LVC00AD
7010-4 74LVC00AD
3050 4K7
7007 BC847B
5002
2011 220u 10V
2007 10u
6000 TSFF5400
6001 TSFF5400
6002 TSFF5400
6003 TSFF5400
3032 100R
3056 150R
7004 BC817-25
3058 1R0
3033 100R
3057 150R
7005 BC817-25
3059 1R0
1028
HLEM4R-1
F191 LED2
F190 LED1
F189
1026
15FE-ST-VK-N
F172 F173 F174 F175 F176 F177 F178 F179 F180 F181 F182 F183 F184 F185
LED_REC
LED_STREAMING
LED_ECO_PWR
RC5
RCMM_RW
UART_RXD
UART_TXD
+5V
+5V_ECO
+3V3
3012 150R
1001 Like Artist SKQNAB
3018 220R
1002 Like Genre SKQNAB
3021 270R
1003 Match-Genre SKQNAB
3000 390R
1004 Menu SKQNAB
3005 560R
1005 Up(Previous) SKQNAB
3008 820R
1006 View SKQNAB
3024 1K2
1021 DBB SKQNAB
3013 150R
1007 Source SKQNAB
3019 220R
1008 Next SKQNAB
3022 270R
1009 Mark/Unmark SKQNAB
3001 390R
1010 Volume+ SKQNAB
3006 560R
1011 Volume- SKQNAB
3009 820R
1012 Music Broadcast SKQNAB
3025 1K2
1013 Music Follow Me SKQNAB
F186
3014 150R
1020 Stop SKQNAB
3020 220R
1015 IS SKQNAB
3023 270R
1016 Mute SKQNAB
3002 390R
1017 Left(Rev) SKQNAB
3007 560R
1018 OK(Play/Pause) SKQNAB
3010 820R
1019 Right(FWD) SKQNAB
1014 REC SKQNAB
1022
HLEM4R-1
F101 F188 F104 F102 F103
+5V
7001 BC847B
3030 10K
2002 22p
NOT USED
LED_REC
LED_STREAMING
LED_ECO_PWR
7000 BC847B
3029 10K
2001 22p
3031 10K
7002 BC847B
+5V_ECO
3035 4K7
BC857B 7015
3039 15K
3038 22K
BC857B 7016
3028 680R
BC857B 7013
3049 47K
3003 390R
3036 4K7
LED1 LED2

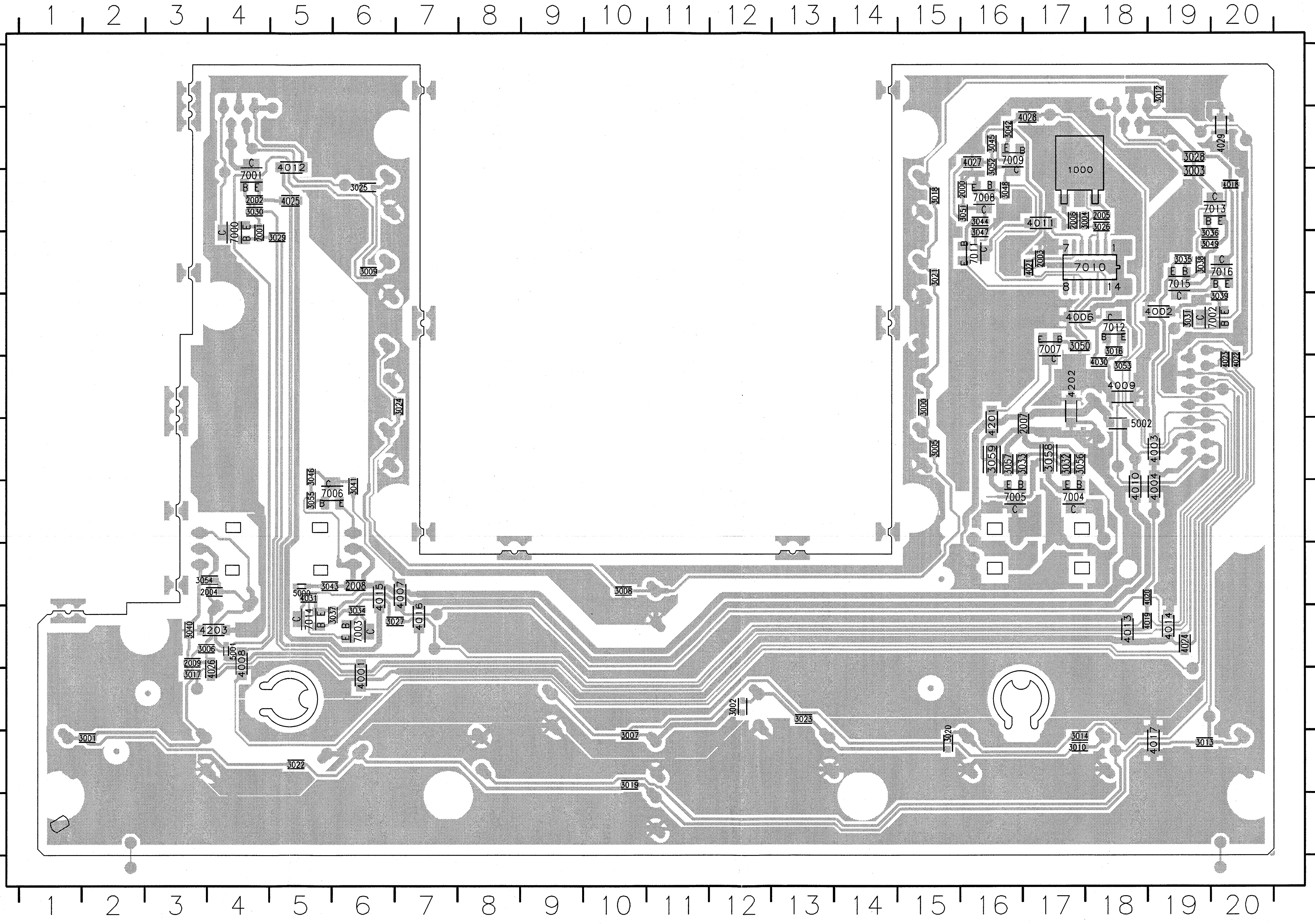
1000	H11
1001	J5
1002	K5
1003	L5
1004	L5
1005	M5
1006	N5
1007	J8
1008	K8
1009	K8
1010	L8
1011	M8
1012	M8
1013	N8
1014	N10
1015	K10
1016	K10
1017	L10
1018	M10
1019	M10
1020	J10
1021	N5
1022	J11
1023	A1
1024	F1
1026	I1
1028	H4
2000	B12
2001	L17
2002	L15
2003	E16
2004	A5
2005	H11
2006	H12
2007	D20
2008	F4
2009	B4
2010	A4
2011	D19
3000	L5
3001	L7
3002	L9
3003	K21
3004	H13
3005	M5
3006	M7
3007	M9
3008	M5
3009	N7
3010	N9
3012	J5
3013	J7
3014	J9
3016	D7
3017	A6
3018	K5
3019	K7
3020	K9
3021	K5
3022	L7
3023	L9
3024	N5
3025	N7
3026	G12
3027	E6
3028	K20
3029	L16
3030	L14
3031	M17
3032	G18
3033	G20
3034	D5
3035	I18
3036	K21
3037	C5
3038	K18
3039	K19
3040	A3
3041	F5
3042	F8
3043	E4
3044	B12
3045	D9
3046	G4
3047	E13
3048	B10
3049	I21
3050	F17
3051	A11
3052	D10
3053	D8
3054	A3
3055	G3
3056	H18
3057	H20
3058	H19
3059	H21
4030	B8
4031	C3
5000	D4
5001	A6
5002	C21
6000	E19
6001	F19
6002	E21
6003	F21
7000	K16
7001	K15
7002	M18
7003	D6
7004	G19
7005	G21
7006	F3
7007	F18
7008	B11
7009	E9
7010-1	F11
7010-2	E14
7010-3	D11
7010-4	E16
7011	D13
7012	C8
7013	J21
7014	D4
7015	J19
7016	J20
F101	J12
F102	K12
F103	K12
F104	K12
F172	I2
F173	J2
F174	J2
F175	J2
F176	J2
F177	J2
F178	J2
F179	K2
F180	K2
F181	K2
F182	K2
F183	K2
F184	L2
F185	L2
F186	N8
F188	K12
F189	I5
F190	H5
F191	H5

KEY COMBINE PANEL - KEY & RC BOARD - Layout Diagram (side A)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
A B C D E F G H I J K L M
1028
1022
1001
1002
1003
1004
1013
1012
1021
1006
1026
2011
6001
6000
6003
6002
K
A
1024
1023
2010
1005
1007
1014
1015
1016
1017
1018
1008
1019
1020
1009
1011
1010

1001	C6
1002	D6
1003	F6
1004	G6
1005	J11
1006	G15
1007	L1
1008	M11
1009	K15
1010	L20
1011	L18
1012	D15
1013	C15
1014	L4
1015	L6
1016	L8
1017	K9
1018	L11
1019	K12
1020	L14
1021	F15
1022	A17
1023	I17
1024	I15
1026	F1
1028	A3
2010	J17
2011	G4
6000	H4
6001	H3
6002	H5
6003	H5

KEY COMBINE PANEL - KEY & RC BOARD - Layout Diagram (side B)


1
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12
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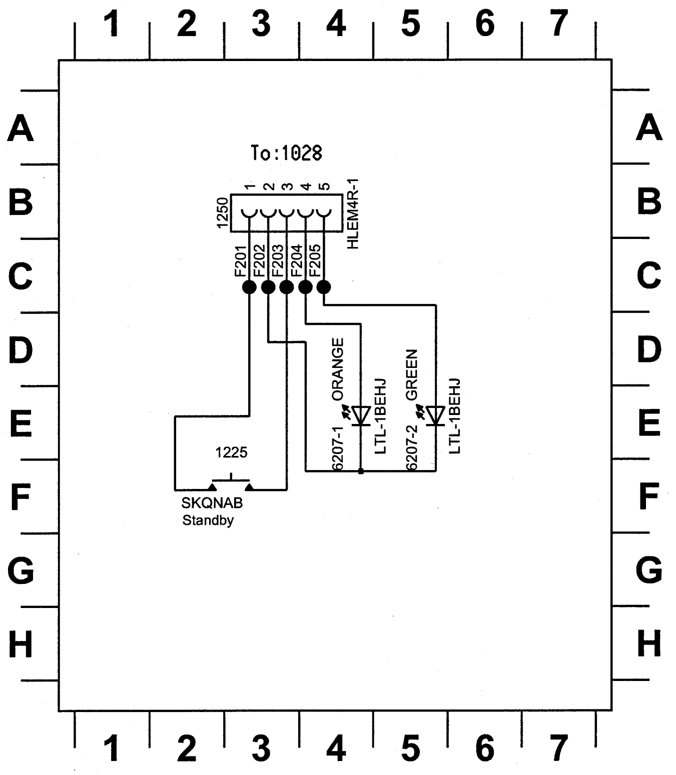
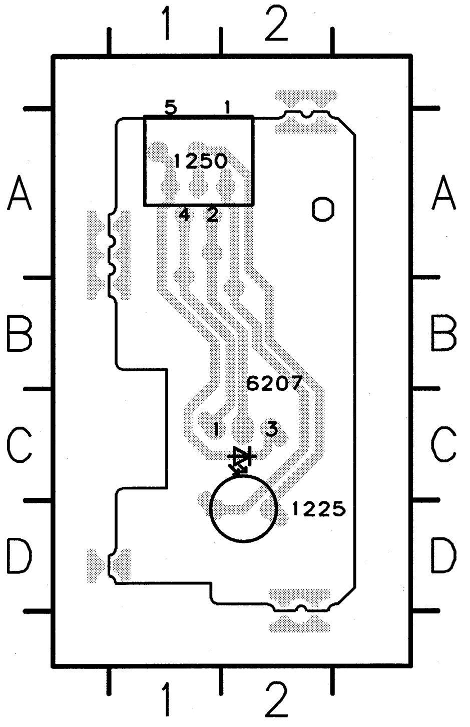
14
15
16
17
18
19
20
A
B
C
D
E
F
G
H
I
J
K
L
M
1000
7010
7001
7000
7006
7014
7003
7007
7008
7009
7011
7012
7013
7015
7016
7002
7005
7004
4012
4025
4028
4027
4011
4006
4009
4202
4201
4203
4002
5002
3025
3009
3024
3008
3007
3023
3019
3022
3001
3002
3020
3014
3010
3013

1000	C17
2000	C16
2001	D4
2002	C4
2003	D17
2004	I4
2005	C18
2006	C17
2007	G17
2008	I6
2009	J3
3000	F15
3001	L2
3002	K12
3003	C19
3004	C17
3005	G15
3006	J3
3007	L10
3008	I10
3009	D6
3010	L17
3012	A19
3013	L19
3014	L17
3016	E18
3017	K3
3018	C15
3019	L10
3020	L15
3021	D15
3022	L5
3023	K13
3024	F7
3025	C6
3026	C18
3027	J6
3028	B19
3029	D5
3030	C4
3031	E19
3032	G17
3033	G16
3034	J6
3035	D19
3036	D19
3037	J6
3038	D19
3039	E20
3040	J3
3041	H6
3042	B16
3043	I5
3044	C16
3045	B16
3046	G5
3047	D16
3048	C16
3049	D19
3050	E17
3051	C16
3052	B16
3053	F18
3054	I3
3055	H5
3056	G17
3057	G16
3058	G17
3059	G16
4001	K6
4002	E19
4003	G19
4004	H19
4006	E17
4007	I7
4008	J4
4009	F18
4010	H18
4011	C17
4012	B5
4013	J18
4014	J19
4015	I6
4016	J7
4017	L19
4018	C20
4019	J18
4020	I18
4021	D17
4022	F20
4023	F20
4024	J19
4025	C5
4026	K4
4027	B16
4028	B17
4029	B20
4030	F18
4031	I5
4201	G16
4202	F17
4203	J4
5000	I5
5001	J4
5002	G18
7000	D4
7001	C4
7002	E20
7003	J6
7004	H17
7005	H16
7006	H5
7007	E17
7008	C16
7009	B16
7010	D18
7011	D16
7012	E18
7013	C20
7014	J5
7015	D19
7016	D20

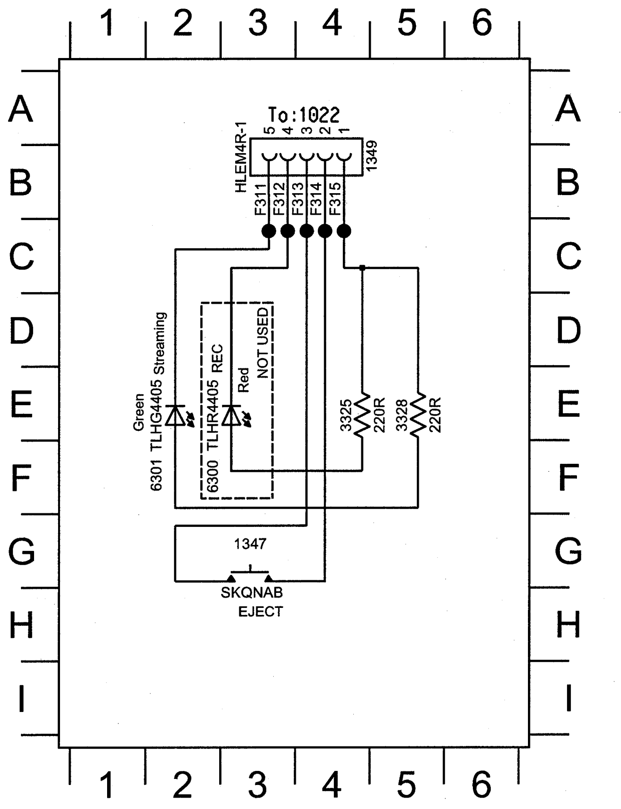
KEY COMBINE PANEL - STANDBY KEY BOARD


To:1028
1250
HLEM4R-1
F201
F202
F203
F204
F205
ORANGE
GREEN
6207-1
6207-2
LTL-1BEHJ
1225
SKQNAB
Standby

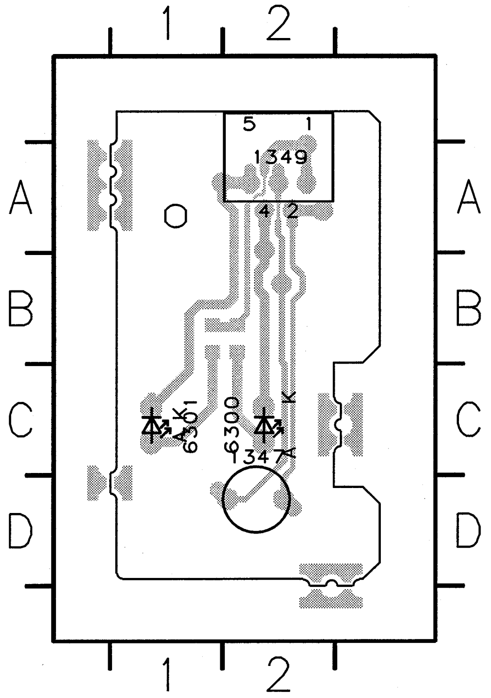
1225	E3
1250	B3
6207-1	E4
6207-2	E5
F201	C3
F202	C3
F203	C3
F204	C4
F205	C4

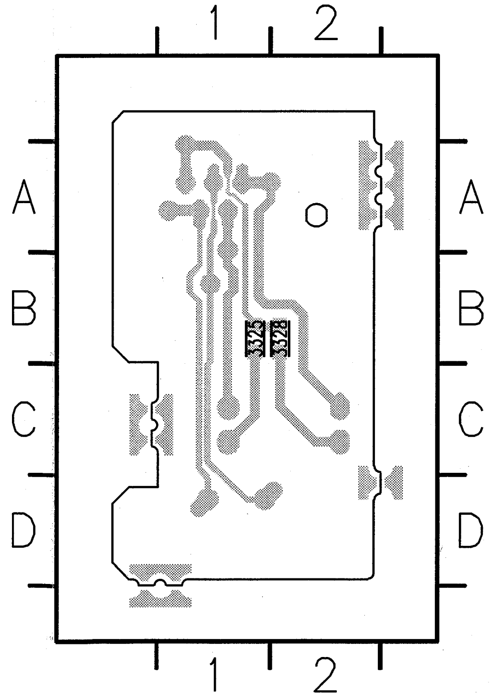

1250
6207
1225

KEY COMBINE PANEL - EJECT KEY BOARD

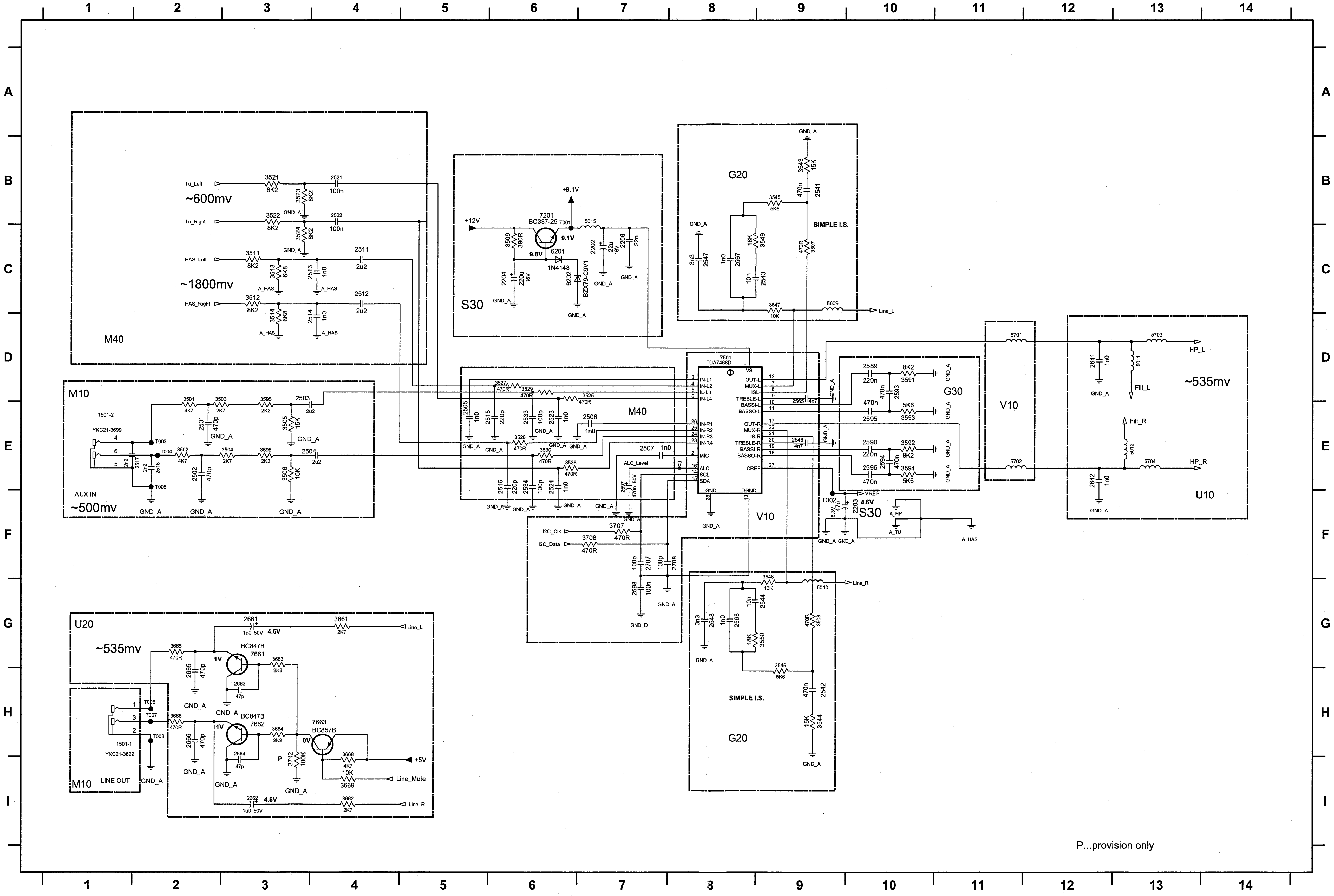

To:1022
1349
HLEM4R-1
F311
F312
F313
F314
F315
6301 TLHG4405 Streaming
Green
6300 TLHR4405 REC
Red
NOT USED
3325
220R
3328
220R
1347
SKQNAB
EJECT

1347	G3
1349	B4
3325	E4
3328	E5
6300	F2
6301	F2
F311	B3
F312	B3
F313	B4
F314	B4
F315	B4


1349
6301
6300
1347



AF BOARD - Circuit Diagram (part 1)


1
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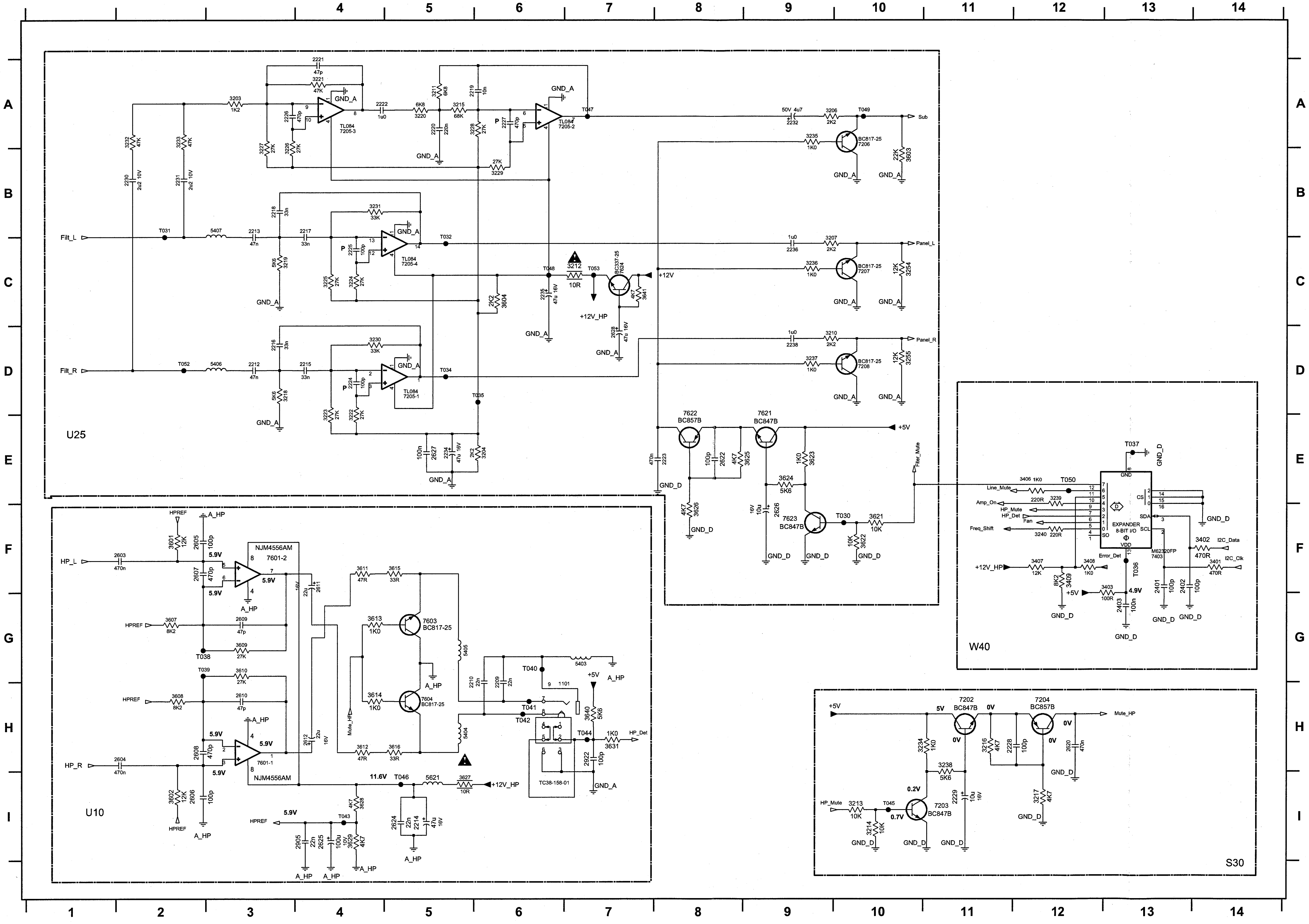
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
M40
Tu_Left
Tu_Right
HAS_Left
HAS_Right
~600mv
~1800mv
3521 8K2
3522 8K2
3523 8K2
3524 8K2
2521 100n
2522 100n
3511 8K2
3512 8K2
3513 6K8
3514 6K8
2513 1n0
2514 1n0
2511 2u2
2512 2u2
GND_A
A_HAS
S30
+12V
+9.1V
7201 BC337-25
T001
9.1V
9.8V
6201 1N4148
6202 BZX79-C9V1
3509 390R
2204 220u 16V
5015
2202 22u 16V
2206 22n
G20
GND_A
3543 15K
2541 470n
3545 5K6
3549 18K
3507 470R
2547 3n3
2567 1n0
2543 10n
3547 10K
5009
SIMPLE I.S.
Line_L
M10
1501-2
YKC21-3699
AUX IN
~500mv
T003
T004
T005
3501 4K7
3502 4K7
3503 2K7
3504 2K7
3595 2K2
3596 2K2
3505 15K
3506 15K
2501 470p
2502 470p
2503 2u2
2504 2u2
2517 2n2
2518 2n2
M40
2505 1n0
2515 220p
2516 220p
2533 100p
2534 100p
2523 1n0
2524 1n0
2506 1n0
3525 470R
3526 470R
3527 470R
3528 470R
3529 470R
3530 470R
7501 TDA7468D
VS
IN-L1
IN-L2
IL-L3
IN-L4
IN-R1
IN-R2
IN-R3
IN-R4
MIC
ALC
SCL
SDA
GND
DGND
OUT-L
MUX-L
ISL
TREBLE-L
BASSI-L
BASSO-L
OUT-R
MUX-R
IS-R
TREBLE-R
BASSI-R
BASSO-R
CREF
2565 4n7
2546 4n7
2507 1n0
ALC_Level
2597 470n 50V
T002
VREF
4.6V
2203 47u 6.3V
A_HP
A_TU
A_HAS
V10
I2C_Clk
I2C_Data
3707 470R
3708 470R
2707 100p
2708 100p
2598 100n
GND_D
G30
2589 220n
2590 220n
2595 470n
2596 470n
2593 470n
2594 470n
3591 8K2
3592 8K2
3593 5K6
3594 5K6
V10
5701
5702
U10
5703
5704
HP_L
HP_R
2641 1n0
2642 1n0
5011
5012
Filt_L
Filt_R
~535mv
3548 10K
5010
Line_R
2548 3n3
2568 1n0
2544 10n
3550 18K
3508 470R
3546 5K6
2542 470n
3544 15K
SIMPLE I.S.
G20
U20
~535mv
2661 1u0 50V
4.6V
3661 2K7
Line_L
3665 470R
2665 470p
1V
BC847B 7661
3663 2K2
2663 47p
1501-1
YKC21-3699
T006
T007
T008
LINE OUT
M10
3666 470R
2666 470p
BC847B 7662
3664 2K2
2664 47p
7663 BC857B
0V
P
3712 100K
3668 4K7
3669 10K
+5V
Line_Mute
2662 1u0 50V
3662 2K7
Line_R
P...provision only

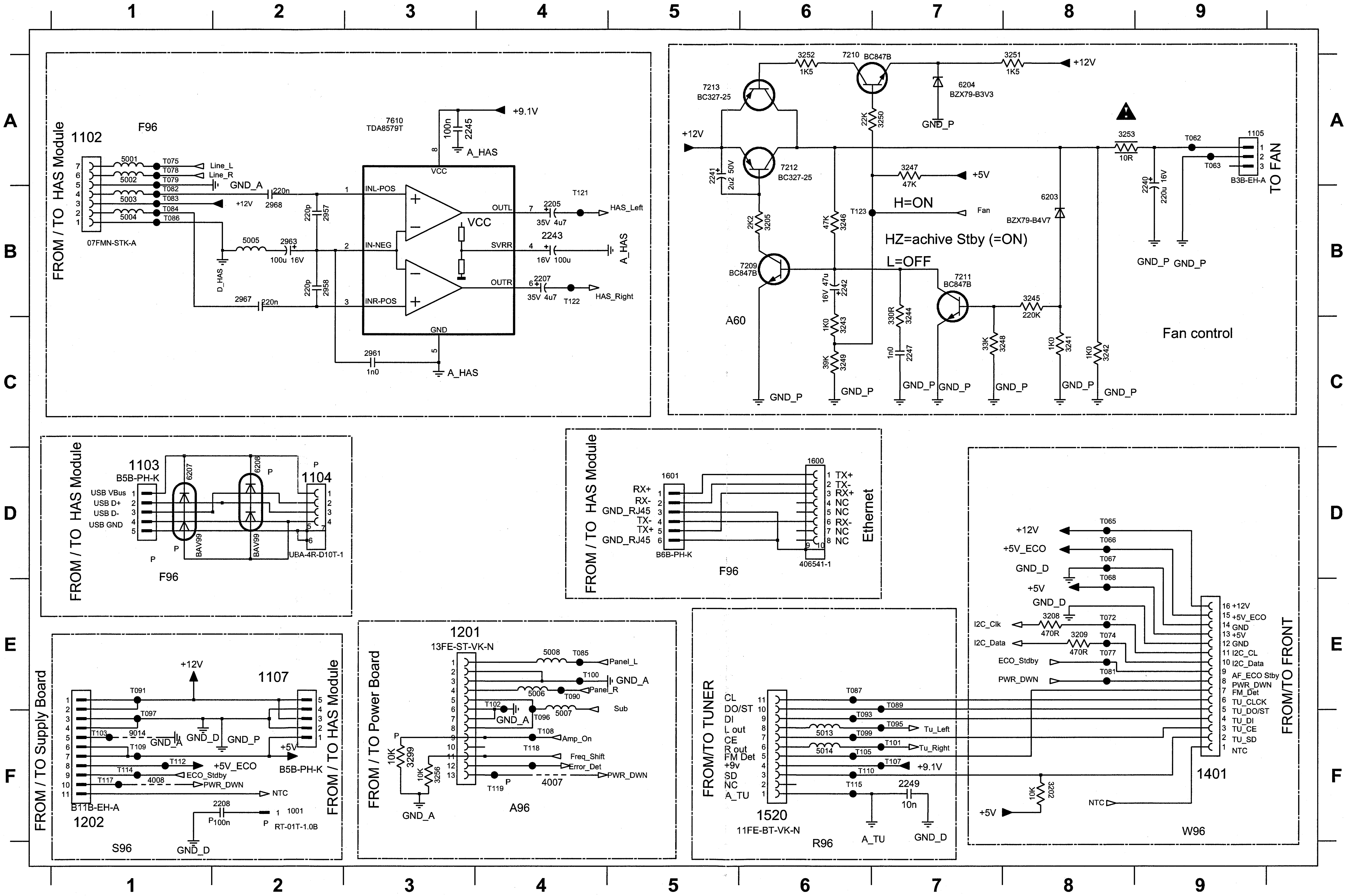
1501-1	H1
1501-2	E1
2202	C7
2203	F10
2204	C6
2206	C7
2501	E2
2502	E2
2503	D3
2504	E3
2505	E5
2506	E7
2507	E7
2511	C4
2512	C4
2513	C4
2514	D4
2515	E6
2516	E6
2517	E2
2518	E2
2521	B4
2522	B4
2523	E6
2524	E6
2533	E6
2534	E6
2541	B9
2542	H9
2543	C9
2544	G9
2546	E9
2547	C8
2548	G8
2565	D9
2567	C8
2568	G8
2589	D10
2590	E10
2593	D10
2594	E10
2595	E10
2596	E10
2597	E7
2598	G7
2641	D12
2642	E12
2661	G3
2662	I3
2663	H3
2664	H3
2665	H2
2666	H2
2707	F7
2708	F8
3501	D2
3502	E2
3503	D2
3504	E3
3505	E3
3506	E3
3507	C9
3508	G9
3509	C6
3511	C3
3512	C3
3513	C3
3514	D3
3521	B3
3522	B3
3523	B3
3524	C3
3525	D7
3526	E6
3527	D6
3528	E6
3529	D6
3530	E6
3543	B9
3544	H9
3545	B9
3546	G9
3547	C9
3548	F9
3549	C9
3550	G9
3591	D10
3592	E10
3593	E10
3594	E10
3595	D3
3596	E3
3661	G4
3662	I4
3663	G3
3664	H3
3665	G2
3666	H2
3668	H4
3669	I4
3707	F7
3708	F7
3712	I3
5009	C9
5010	G9
5011	D13
5012	E13
5015	B7
5701	D11
5702	E11
5703	D13
5704	E13
6201	C6
6202	C6
7201	B6
7501	D8
7661	G3
7662	H3
7663	H4
T001	B6
T002	F9
T003	E2
T004	E2
T005	E2
T006	H2
T007	H2
T008	H2

AF BOARD - Circuit Diagram (part 2)


U25
U10
W40
S30
Filt_L
Filt_R
Sub
Panel_L
Panel_R
+12V
+12V_HP
+5V
Filter_Mute
TL084 7205-3
TL084 7205-2
TL084 7205-4
TL084 7205-1
BC817-25 7206
BC817-25 7207
BC817-25 7208
BC337-25 7624
7622 BC857B
7621 BC847B
7623 BC847B
GND_A
GND_D
HP_L
HP_R
HPREF
A_HP
NJM4556AM 7601-2
NJM4556AM 7601-1
7603 BC817-25
7604 BC817-25
Mute_HP
HP_Det
TC38-158-01
1101
Line_Mute
Amp_On
HP_Mute
HP_Det
Fan
Freq_Shift
Error_Det
EXPANDER 8-BIT I/O
M62320FP 7403
I2C_Data
I2C_Clk
7202 BC847B
7204 BC857B
7203 BC847B
5.9V
11.6V
0.2V
0.7V
5V
0V
4.9V

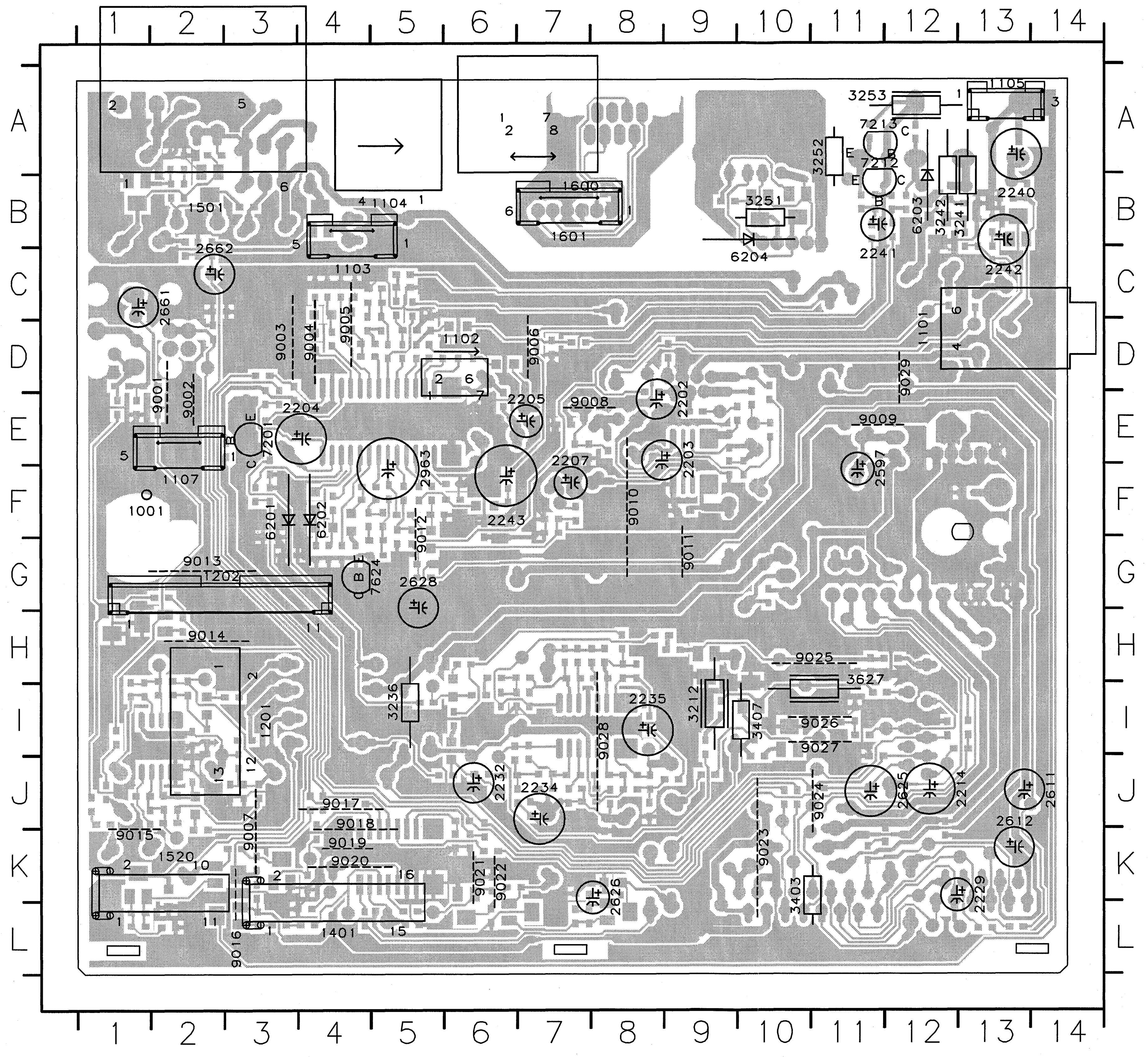
1101	H6
2209	H6
2210	H5
2212	D3
2213	B3
2214	I5
2215	D4
2216	D3
2217	B4
2218	B3
2219	A5
2220	A5
2221	A4
2222	A4
2223	E8
2224	D4
2225	C4
2226	A3
2227	A6
2228	H11
2229	I11
2230	B2
2231	B2
2232	A9
2234	E5
2235	C6
2236	C9
2238	D9
2401	F13
2402	F13
2403	G13
2603	F2
2604	H2
2605	F2
2606	I2
2607	F2
2608	H2
2609	G3
2610	H3
2611	F4
2612	H4
2620	H12
2622	E8
2624	I5
2625	I4
2626	F9
2627	E5
2628	D7
2905	I4
2922	H7
3203	A3
3204	E6
3206	A9
3207	C9
3210	D9
3211	A5
3212	C7
3213	I10
3214	I10
3215	A5
3216	H11
3217	I12
3218	D3
3219	C3
3220	A5
3221	A4
3222	E4
3223	E4
3224	C4
3225	C4
3226	B3
3227	B3
3228	A5
3229	B6
3230	D4
3231	B4
3232	A2
3233	A2
3234	H10
3235	A9
3236	C9
3237	D9
3238	H11
3239	E12
3240	F12
3254	C10
3255	D10
3401	F14
3402	F14
3403	F13
3406	E12
3407	F12
3408	F12
3409	F12
3601	F2
3602	I2
3603	B10
3604	C6
3607	G2
3608	H2
3609	G3
3610	G3
3611	F4
3612	H4
3613	G4
3614	H4
3615	F5
3616	H5
3621	F10
3622	F10
3623	E9
3624	E9
3625	E9
3626	F8
3627	I5
3628	I4
3629	I4
3631	H7
3640	H7
3641	C7
5403	G7
5404	H5
5405	G5
5406	D3
5407	B3
5621	I5
7202	H11
7203	I11
7204	H12
7205-1	D5
7205-2	A6
7205-3	A4
7205-4	C5
7206	A10
7207	C10
7208	D10
7403	F13
7601-1	H3
7601-2	F3
7603	G5
7604	H5
7621	E9
7622	D8
7623	F9
7624	C7
T030	F10
T031	B2
T032	C5
T034	D5
T035	D6
T036	F13
T037	E13
T038	G2
T039	G2
T040	G6
T041	H6
T042	H6
T043	I4
T044	H7
T045	I10
T046	I5
T047	A7
T048	C6
T049	A10
T052	D2
T053	C7

AF BOARD - Circuit Diagram (part 3)


1102
F96
FROM / TO HAS Module
07FMN-STK-A
5001
5002
5003
5004
5005
T075
T078
T079
T082
T083
T084
T086
Line_L
Line_R
GND_A
+12V
D_HAS
2968
2963
2967
220n
100u 16V
2957
2958
220p
7610
TDA8579T
+9.1V
100n
2245
A_HAS
VCC
INL-POS
IN-NEG
INR-POS
OUTL
SVRR
OUTR
GND
2205
35V 4u7
2243
16V 100u
2207
T121
T122
HAS_Left
HAS_Right
2961
1n0
7213
BC327-25
3252
1K5
7210
BC847B
3251
+12V
6204
BZX79-B3V3
GND_P
7212
2241
2u2 50V
3250
22K
3247
47K
+5V
H=ON
Fan
T123
6203
BZX79-B4V7
3253
10R
T062
T063
1105
B3B-EH-A
TO FAN
2240
220u 16V
HZ=achive Stby (=ON)
L=OFF
3205
2K2
3246
47K
7209
BC847B
2242
16V 47u
7211
BC847B
3245
220K
3243
1K0
3249
39K
3244
330R
2247
1n0
3248
33K
3241
3242
1K0
A60
Fan control
1103
B5B-PH-K
USB VBus
USB D+
USB D-
USB GND
6207
6208
BAV99
1104
UBA-4R-D10T-1
P
F96
FROM / TO HAS Module
1601
B6B-PH-K
RX+
RX-
GND_RJ45
TX-
TX+
1600
406541-1
TX+
TX-
RX+
NC
RX-
Ethernet
F96
FROM / TO Supply Board
1202
B11B-EH-A
1107
B5B-PH-K
T091
T097
T103
9014
T109
GND_A
GND_D
GND_P
+5V
T112
+5V_ECO
T114
ECO_Stdby
T117
4008
PWR_DWN
NTC
2208
100n
1001
RT-01T-1.0B
S96
FROM / TO HAS Module
FROM / TO Power Board
1201
13FE-ST-VK-N
5008
T085
Panel_L
T100
5006
Panel_R
T090
T102
T096
5007
Sub
T108
Amp_On
T118
Freq_Shift
Error_Det
4007
PWR_DWN
T119
3299
10K
3256
A96
FROM/TO TUNER
CL
DO/ST
DI
L out
CE
R out
FM Det
+9v
SD
NC
A_TU
T087
T089
T093
T095
Tu_Left
5013
5014
T101
Tu_Right
T105
T107
+9.1V
T110
T115
2249
10n
1520
11FE-BT-VK-N
R96
A_TU
GND_D
+12V
+5V_ECO
GND_D
+5V
T065
T066
T067
T068
I2C_Clk
I2C_Data
3208
470R
3209
T072
T074
T077
ECO_Stdby
PWR_DWN
T081
16 +12V
15 +5V_ECO
14 GND
13 +5V
12 GND
11 I2C_CL
10 I2C_Data
9 AF_ECO Stby
8 PWR_DWN
7 FM_Det
6 TU_CLCK
5 TU_DO/ST
4 TU_DI
3 TU_CE
2 TU_SD
1 NTC
1401
3202
10K
NTC
W96
FROM/TO FRONT
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

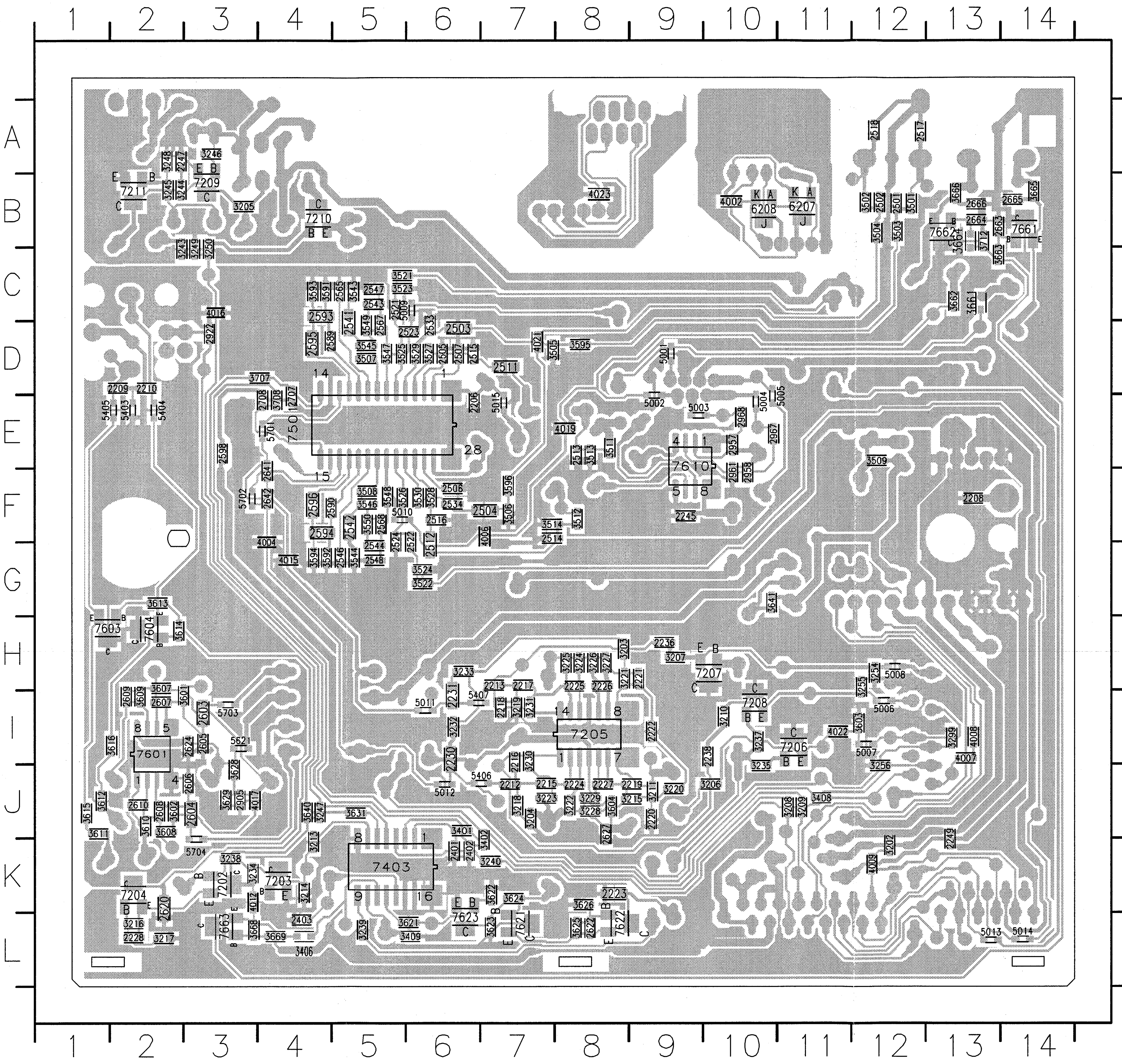
1001	F2
1102	A1
1103	D1
1104	D2
1105	A9
1107	E2
1201	E4
1202	F1
1401	F9
1520	F6
1600	D6
1601	D5
2205	B4
2207	B4
2208	F2
2240	A9
2241	A5
2242	B6
2243	B4
2245	A3
2247	C7
2249	F7
2957	B2
2958	B2
2961	C3
2963	B2
2967	B2
2968	B2
3202	F8
3205	B6
3208	E8
3209	E8
3241	C8
3242	C8
3243	C6
3244	B7
3245	B8
3246	B6
3247	A7
3248	C7
3249	C6
3250	A7
3251	A8
3252	A6
3253	A8
3256	F3
3299	F3
4007	F4
4008	F1
5001	A1
5002	A1
5003	B1
5004	B1
5005	B2
5006	E4
5007	F4
5008	E4
5013	F6
5014	F6
6203	B8
6204	A7
6207	D1
6208	D2
7209	B6
7210	A6
7211	B7
7212	A6
7213	A5
7610	A3
9014	F1
T062	A9
T063	A9
T065	D8
T066	D8
T067	D8
T068	E8
T072	E8
T074	E8
T075	A1
T077	E8
T078	A1
T079	A1
T081	E8
T082	B1
T083	B1
T084	B1
T085	E4
T086	B1
T087	E6
T089	E7
T090	E4
T091	E1
T093	F6
T095	F7
T096	F4
T097	F1
T099	F6
T100	E4
T101	F7
T102	E4
T103	F1
T105	F6
T107	F7
T108	F4
T109	F1
T110	F6
T112	F1
T114	F1
T115	F6
T117	F1
T118	F4
T119	F4
T121	B4
T122	B4
T123	B6

AF BOARD - Layout Diagram (side A)


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J K L
1001
1101
1102
1103
1104
1105
1107
1201
1401
1501
1520
1600
1601
2202
2203
2204
2205
2207
2214
2229
2232
2234
2235
2240
2241
2242
2243
2597
2611
2612
2625
2626
2628
2661
2662
2963
3212
3236
3241
3242
3251
3252
3253
3403
3407
3627
6201
6202
6203
6204
7201
7212
7213
7624
T202
9001
9002
9003
9004
9005
9006
9007
9008
9009
9010
9011
9012
9013
9014
9015
9016
9017
9018
9019
9020
9021
9022
9023
9024
9025
9026
9027
9028
9029

1001	F1
1101	D12
1102	D6
1103	C4
1104	B5
1105	A13
1107	F2
1201	I3
1202	G2
1401	L4
1501	B2
1520	K2
1600	B7
1601	B7
2202	E9
2203	E9
2204	E4
2205	E7
2207	E7
2214	J13
2229	K13
2232	J6
2234	J7
2235	I8
2240	B13
2241	C11
2242	C13
2243	F6
2597	F11
2611	J14
2612	J13
2625	J12
2626	K8
2628	G5
2661	C2
2662	C2
2963	F5
3212	I9
3236	I5
3241	B13
3242	B12
3251	B10
3252	A11
3253	A11
3403	K10
3407	I10
3627	H11
6201	F3
6202	F4
6203	B12
6204	C10
7201	E3
7212	A11
7213	A11
7624	G5
9001	E2
9002	E2
9003	D3
9004	D4
9005	D4
9006	D7
9007	K3
9008	E7
9009	E11
9010	F8
9011	G9
9012	F5
9013	G2
9014	H2
9015	K1
9016	L3
9017	J4
9018	J4
9019	K4
9020	K4
9021	K6
9022	K6
9023	K10
9024	J11
9025	H11
9026	I11
9027	I11
9028	I8
9029	D12

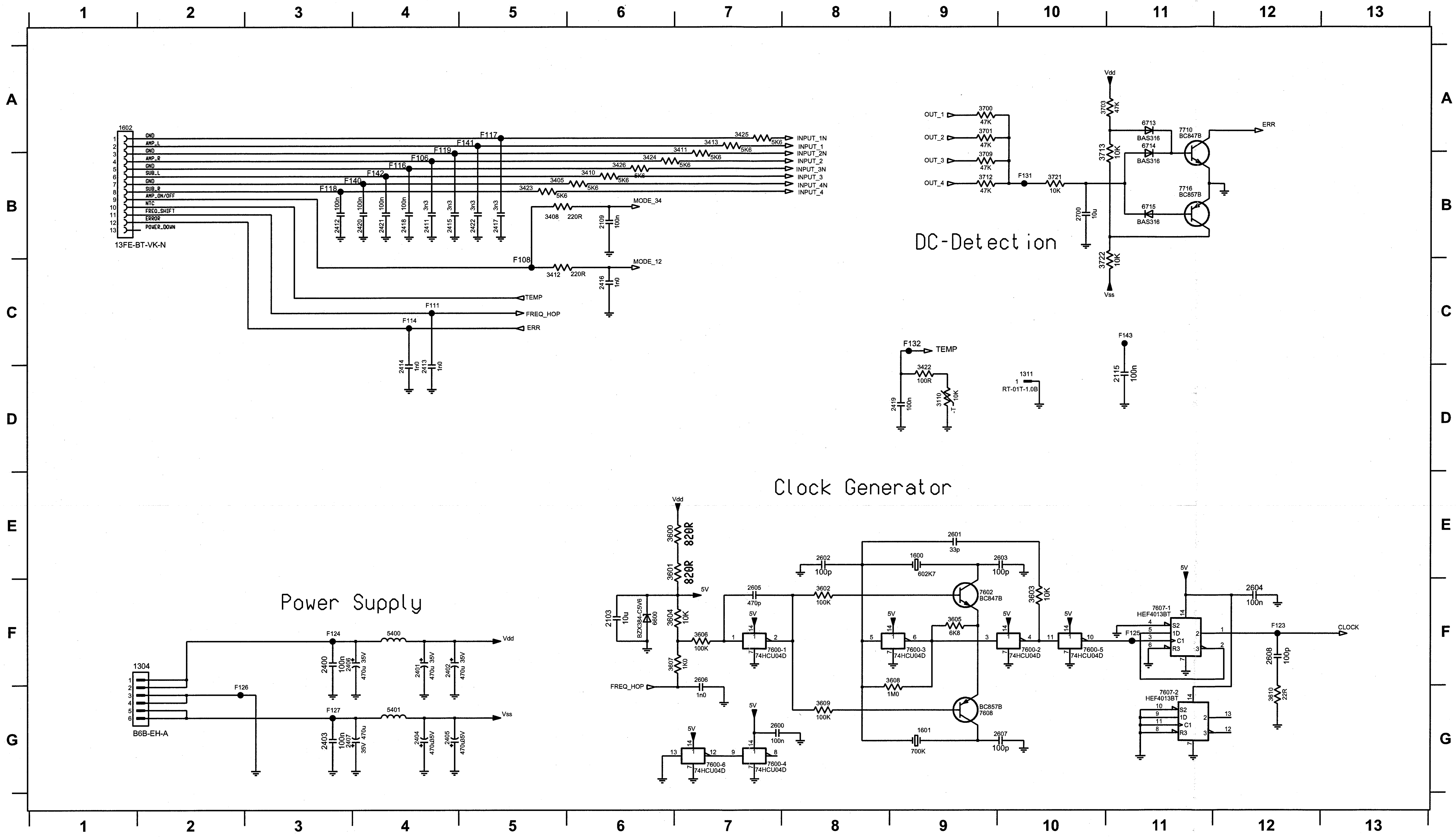
AF BOARD - Layout Diagram (side A)



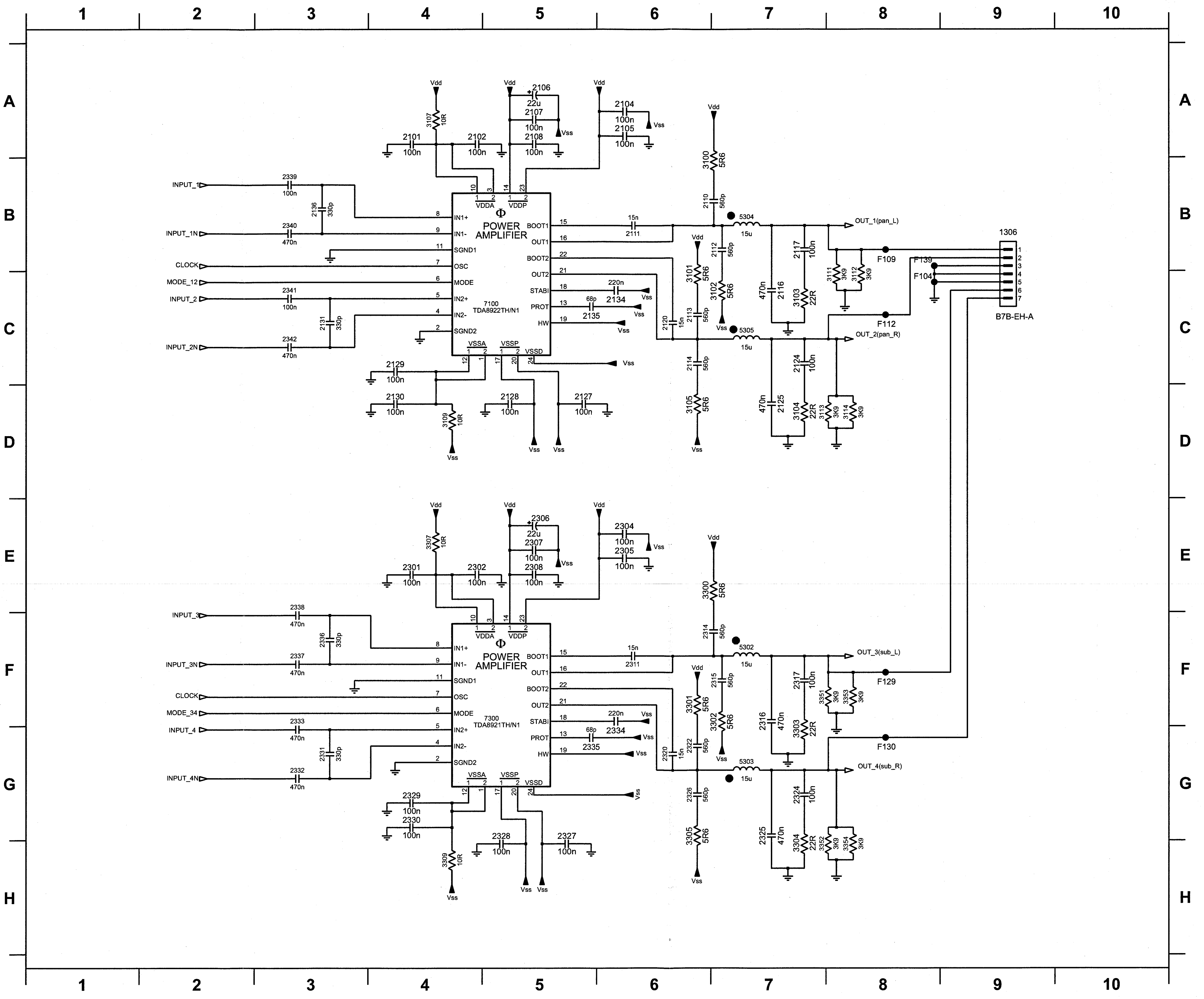
2206	E6	2589	D4	3230	I7	3594	G4	5009	C5
2208	F13	2590	F4	3231	I7	3595	D8	5010	F5
2209	D2	2593	C4	3232	I6	3596	F7	5011	I6
2210	D2	2594	F4	3233	H6	3601	I2	5012	J6
2212	J7	2595	D4	3234	K3	3602	J2	5013	L13
2213	H7	2596	F4	3235	J10	3603	I12	5014	L14
2215	J7	2598	E3	3237	I10	3604	J8	5015	E7
2216	I7	2603	I3	3238	K3	3607	H2	5403	E2
2217	H7	2604	J3	3239	L5	3608	J2	5404	E2
2218	I7	2605	I3	3240	K7	3609	I2	5405	E1
2219	J9	2606	J3	3243	C2	3610	J2	5406	J7
2220	J9	2607	I2	3244	B2	3611	J1	5407	I6
2221	H9	2608	J2	3245	B2	3612	J1	5621	I3
2222	I9	2609	I2	3246	A3	3613	G2	5701	E4
2223	K8	2610	J2	3247	J4	3614	H2	5702	F4
2224	J8	2620	K2	3248	A2	3615	J1	5703	I3
2225	H8	2622	L8	3249	C3	3616	I2	5704	K3
2226	H8	2624	I3	3250	C3	3621	L6	6207	B11
2227	J8	2627	J8	3254	H12	3622	K7	6208	B10
2228	L2	2641	F4	3255	H12	3623	L7	7202	K3
2230	I6	2642	F4	3256	J12	3624	K7	7203	K4
2231	I6	2663	B13	3299	I13	3625	L8	7204	K2
2236	H9	2664	B13	3401	J6	3626	K8	7205	I8
2238	I10	2665	B14	3402	K7	3628	J3	7206	I11
2245	F9	2666	B13	3406	L4	3629	J3	7207	H10
2247	A2	2707	E4	3408	J11	3631	J5	7208	I10
2249	K13	2708	E4	3409	L6	3640	J4	7209	B3
2401	K6	2905	J3	3501	B12	3641	G10	7210	B4
2402	K6	2922	D3	3502	B12	3661	C13	7211	B2
2403	L4	2957	E10	3503	B12	3662	C13	7403	K5
2501	B12	2958	F10	3504	B12	3663	C13	7501	E4
2502	B12	2961	F10	3505	D7	3664	B13	7601	I2
2503	D6	2967	E10	3506	F7	3665	B14	7603	H1
2504	F7	2968	E10	3507	D5	3666	B13	7604	H2
2505	D6	3202	K12	3508	F5	3668	L3	7610	E9
2506	F6	3203	H8	3509	E12	3669	L4	7621	L7
2507	D6	3204	J7	3511	E8	3707	D4	7622	L8
2511	D7	3205	B3	3512	F8	3708	E4	7623	L6
2512	G6	3206	J10	3513	E8	3712	B13	7661	B14
2513	E8	3207	H9	3514	F7	4002	B10	7662	B13
2514	F7	3208	J11	3521	C5	4004	F4	7663	L3
2515	D6	3209	J11	3522	G6	4006	F7		
2516	F6	3210	I10	3523	C5	4007	I13		
2517	A12	3211	J9	3524	G6	4008	I13		
2518	A12	3213	K4	3525	D5	4009	K12		
2521	C5	3214	K4	3526	F5	4012	K3		
2522	F6	3215	J9	3527	D6	4015	G4		
2523	D6	3216	L2	3528	F6	4016	C3		
2524	F5	3217	L2	3529	D6	4017	J3		
2533	D6	3218	J7	3530	F6	4019	E8		
2534	F6	3219	I7	3543	C5	4021	D7		
2541	D5	3220	J9	3544	G5	4022	I11		
2542	F5	3221	H8	3545	D5	4023	B8		
2543	C5	3222	J8	3546	F5	5001	D9		
2544	G5	3223	J7	3547	D5	5002	E9		
2546	G5	3224	H8	3548	F5	5003	E9		
2547	C5	3225	H8	3549	D5	5004	E10		
2548	G5	3226	H8	3550	F5	5005	E11		
2565	C5	3227	H8	3591	C4	5006	I12		
2567	D5	3228	J8	3592	G4	5007	I12		
2568	F5	3229	J8	3593	C4	5008	H12		

AMPLIFIER BOARD - Circuit Diagram (part 1)

1304 F1
1311 D10
1600 E9
1601 G9
1602 A1
2103 F6
2109 B6
2115 D11
2400 F3
2401 F4
2402 F4
2403 G3
2404 G4
2405 G4
2406 F3
2407 G3
2411 B4
2412 B3
2413 D4
2414 D4
2415 B4
2416 C6
2417 B5
2418 B4
2419 D9
2420 B4
2421 B4
2422 B5
2600 G7
2601 E9
2602 E8
2603 E10
2604 F12
2605 F7
2606 F7
2607 G10
2608 F12
2700 B10
3110 D9
3405 B6
3408 B5
3410 B6
3411 A7
3412 C5
3413 A7
3422 D9
3423 B5
3424 B6
3425 A7
3426 B6
3600 E6
3601 E6
3602 F8
3603 F10
3604 F6
3605 F9
3606 F7
3607 F6
3608 F9
3609 G8
3610 G12
3700 A9
3701 A9
3703 A10
3709 B9
3712 B9
3713 B10
3721 B10
3722 C10
5400 F4
5401 G4
6600 F6
6713 A11
6714 A11
6715 B11
7600-1 F8
7600-2 F10
7600-3 F9
7600-4 G8
7600-5 F10
7600-6 G7
7602 F9
7607-1 F11
7607-2 G11
7608 G9
7710 A11
7716 B11
F106 B4
F108 C5
F111 C4
F114 C4
F116 B4
F117 A5
F118 B3
F119 B4
F123 F12
F124 F3
F125 F11
F126 G2
F127 G3
F131 B10
F132 C9
F140 B4
F141 A5
F142 B4
F143 C11

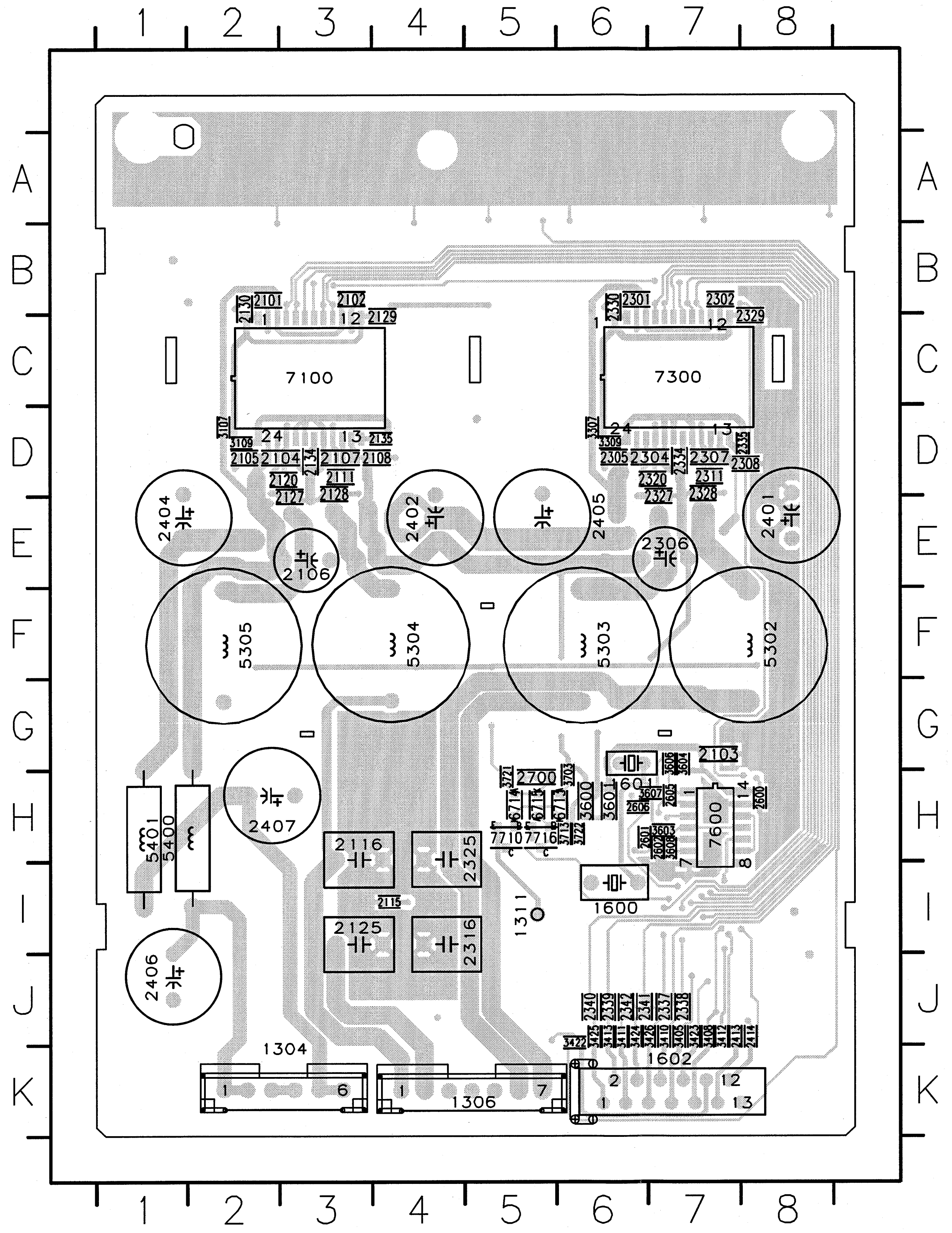

1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
1602
GND
AMP_L
GND
AMP_R
GND
SUB_L
GND
SUB_R
AMP_ON/OFF
NTC
FREQ_SHIFT
ERROR
POWER_DOWN
13FE-BT-VK-N
F117
F141
F119
F106
F116
F142
F140
F118
3425
5K6
3413
5K6
3411
5K6
3424
5K6
3426
5K6
3410
5K6
3405
5K6
3423
5K6
INPUT_1N
INPUT_1
INPUT_2N
INPUT_2
INPUT_3N
INPUT_3
INPUT_4N
INPUT_4
2412
100n
2420
100n
2421
100n
2418
100n
2411
3n3
2415
3n3
2422
3n3
2417
3n3
3408
220R
2109
100n
MODE_34
F108
3412
220R
2416
1n0
MODE_12
TEMP
F111
FREQ_HOP
F114
ERR
2414
1n0
2413
1n0
Vdd
3703
47K
OUT_1
3700
47K
OUT_2
3701
47K
OUT_3
3709
47K
OUT_4
3712
47K
F131
3721
10K
2700
10u
3713
10K
6713
BAS316
6714
BAS316
7710
BC847B
ERR
7716
BC857B
6715
BAS316
3722
10K
Vss
DC-Detection
F132
TEMP
3422
100R
2419
100n
3110
-T
10K
1311
1
RT-01T-1.0B
F143
2115
100n
Clock Generator
Vdd
3600
820R
3601
820R
5V
2103
10u
6600
BZX384-C5V6
3604
10K
3606
100K
3607
1K0
FREQ_HOP
2606
1n0
2605
470p
5V
1
14
7
2
7600-1
74HCU04D
2602
100p
3602
100K
1600
602K7
2601
33p
2603
100p
7602
BC847B
3603
10K
5V
5
14
7
6
7600-3
74HCU04D
3605
6K8
3608
1M0
5V
3
14
7
4
7600-2
74HCU04D
5V
11
14
7
10
7600-5
74HCU04D
3609
100K
7608
BC857B
1601
700K
2607
100p
5V
13
14
7
12
7600-6
74HCU04D
5V
9
14
7
8
7600-4
74HCU04D
2600
100n
5V
2604
100n
7607-1
HEF4013BT
F125
S2
1D
C1
R3
4
5
3
6
14
1
2
7
F123
CLOCK
2608
100p
3610
22R
7607-2
HEF4013BT
10
9
11
8
S2
1D
C1
R3
13
12
14
7
Power Supply
1304
1
2
3
4
5
6
B6B-EH-A
F124
5400
Vdd
2400
100n
2406
470u
35V
2401
470u
35V
2402
470u
35V
F126
F127
5401
Vss
2403
100n
2407
35V
470u
2404
470u
35V
2405
470u
35V

AMPLIFIER BOARD - Circuit Diagram (part 2)


1 2 3 4 5 6 7 8 9 10
A B C D E F G H
Vdd
Vss
3107 10R
2101 100n
2102 100n
2106 22u
2107 100n
2108 100n
2104 100n
2105 100n
INPUT_1
2339 100n
2136 330p
INPUT_1N
2340 470n
CLOCK
MODE_12
INPUT_2
2341 100n
2131 330p
INPUT_2N
2342 470n
POWER AMPLIFIER
7100 TDA8922TH/N1
VDDA
VDDP
IN1+
IN1-
SGND1
OSC
MODE
IN2+
IN2-
SGND2
VSSA
VSSP
VSSD
BOOT1
OUT1
BOOT2
OUT2
STABI
PROT
HW
2111 15n
2134 220n
2135 68p
2120 15n
2129 100n
2130 100n
3109 10R
2128 100n
2127 100n
3100 5R6
2110 560p
5304 15u
2112 560p
3101 5R6
3102 5R6
2113 560p
5305 15u
2114 560p
3105 5R6
2116 470n
2117 100n
3103 22R
2125 470n
2124 100n
3104 22R
3111 3K9
3112 3K9
3113 3K9
3114 3K9
OUT_1(pan_L)
OUT_2(pan_R)
F109
F139
F104
F112
1306
B7B-EH-A
3307 10R
2301 100n
2302 100n
2306 22u
2307 100n
2308 100n
2304 100n
2305 100n
INPUT_3
2338 470n
2336 330p
INPUT_3N
2337 470n
MODE_34
INPUT_4
2333 470n
2331 330p
INPUT_4N
2332 470n
7300 TDA8921TH/N1
2311 15n
2334 220n
2335 68p
2320 15n
2329 100n
2330 100n
3309 10R
2328 100n
2327 100n
3300 5R6
2314 560p
5302 15u
2315 560p
3301 5R6
3302 5R6
2322 560p
5303 15u
2326 560p
3305 5R6
2316 470n
2317 100n
3303 22R
2325 470n
2324 100n
3304 22R
3351 3K9
3353 3K9
3352 3K9
3354 3K9
OUT_3(sub_L)
OUT_4(sub_R)
F129
F130

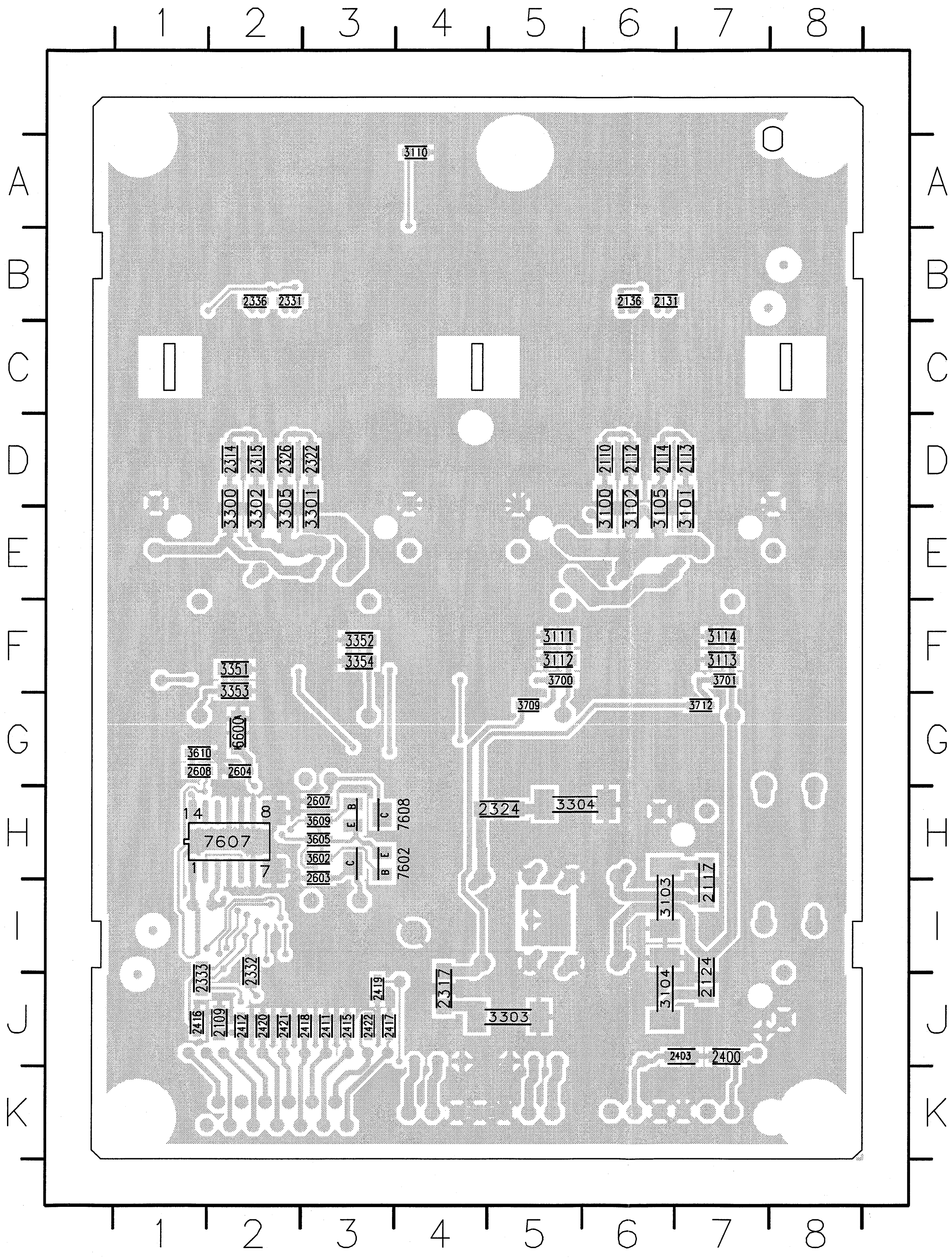
1306	B9
2101	A4
2102	A4
2104	A6
2105	A6
2106	A5
2107	A5
2108	A5
2110	B6
2111	B6
2112	B7
2113	C6
2114	C6
2116	C7
2117	B7
2120	C6
2124	C7
2125	D7
2127	D5
2128	D5
2129	C4
2130	D4
2131	C3
2134	C6
2135	C5
2136	B3
2301	E4
2302	E4
2304	E6
2305	E6
2306	E5
2307	E5
2308	E5
2311	F6
2314	F6
2315	F7
2316	F7
2317	F7
2320	G6
2322	G6
2324	G7
2325	G7
2326	G6
2327	G5
2328	G5
2329	G4
2330	G4
2331	G3
2332	G3
2333	F3
2334	G6
2335	G5
2336	F3
2337	F3
2338	E3
2339	B3
2340	B3
2341	C3
2342	C3
3100	B6
3101	C6
3102	C7
3103	C7
3104	D7
3105	D6
3107	A4
3109	D4
3111	C8
3112	C8
3113	D7
3114	D8
3300	E6
3301	F6
3302	F7
3303	G7
3304	H7
3305	G6
3307	E4
3309	H4
3351	F7
3352	H7
3353	F8
3354	H8
5302	F7
5303	G7
5304	B7
5305	C7
7100	C5
7300	F5
F104	C8
F109	B8
F112	C8
F129	F8
F130	G8
F139	B8

AMPLIFIER BOARD - Layout Diagram (side A)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
7100
7300
2101
2102
2129
2130
2301
2302
2329
2330
3107
3109
2105
2104
2134
2107
2108
2120
2127
2111
2128
2135
3307
3309
2305
2304
2334
2307
2308
2320
2327
2311
2328
2335
2404
2106
2402
2405
2306
2401
5305
5304
5303
5302
5401
5400
2407
2116
2325
2115
2125
2316
1311
2406
2700
3721
3703
3600
3601
1601
3606
3604
2103
2600
3607
2605
2606
6714
6713
6715
3713
3722
7710
7716
2601
2602
3603
3608
7600
1600
2340
2339
2342
2341
2337
2338
3422
1602
1304
1306

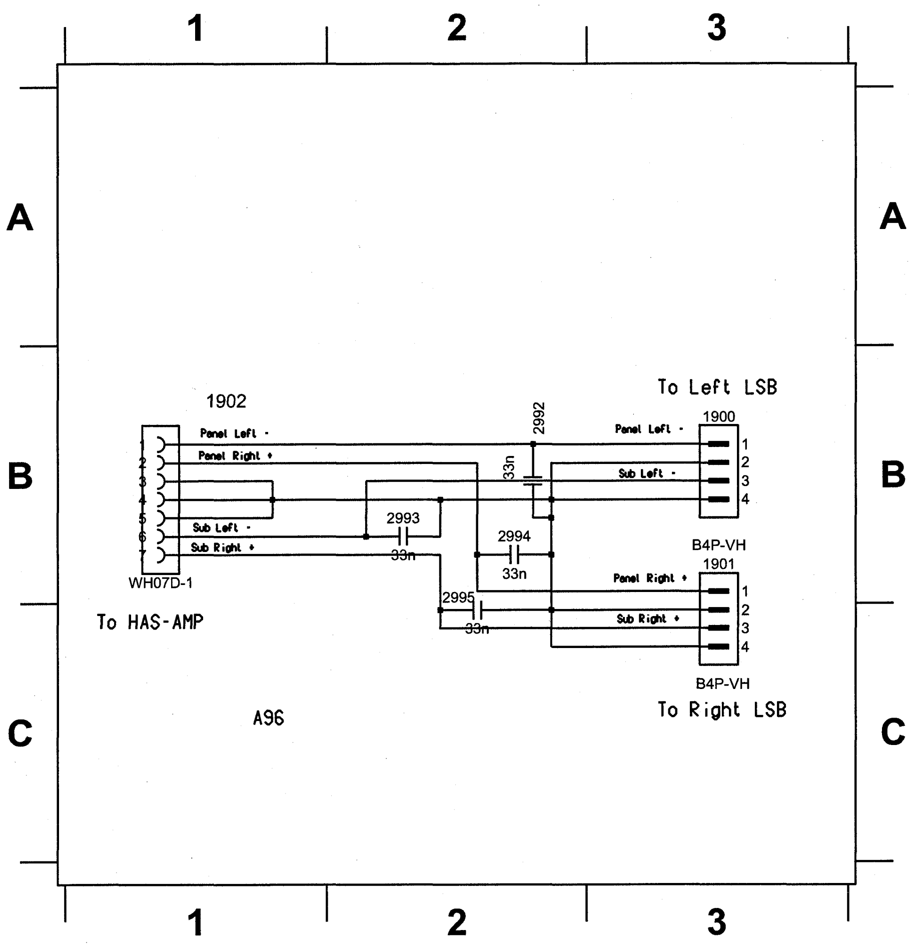
1304	K3
1306	K5
1311	I5
1600	I6
1601	H6
1602	J7
2101	B2
2102	B3
2103	G7
2104	D3
2105	D2
2106	E3
2107	D3
2108	D4
2111	D3
2115	I4
2116	H3
2120	D3
2125	I3
2127	E3
2128	D3
2129	C4
2130	B2
2134	D3
2135	D4
2301	B6
2302	B7
2304	D7
2305	D6
2306	E7
2307	D7
2308	D8
2311	D7
2316	I5
2320	D7
2325	H5
2327	E7
2328	D7
2329	C8
2330	B6
2334	D7
2335	D8
2337	J7
2338	J7
2339	J6
2340	J6
2341	J6
2342	J6
2401	E8
2402	E4
2404	E1
2405	E6
2406	J1
2407	H2
2413	J7
2414	J8
2600	H8
2601	H6
2602	H7
2605	H7
2606	H6
2700	H5
3107	D2
3109	D2
3307	D6
3309	D6
3405	J7
3408	J7
3410	J7
3411	J6
3412	J7
3413	J6
3422	J6
3423	J7
3424	J6
3425	J6
3426	J7
3600	H6
3601	H6
3603	H7
3604	G7
3606	G7
3607	H7
3608	H7
3703	H6
3713	H6
3721	H5
3722	H6
5302	F8
5303	F6
5304	F4
5305	F2
5400	H1
5401	H1
6713	H6
6714	H5
6715	H5
7100	C3
7300	C7
7600	H7
7710	H5
7716	H5

AMPLIFIER BOARD - Layout Diagram (side B)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
3110
2336
2331
2136
2131
2314
2315
2326
2322
3300
3302
3305
3301
2110
2112
2114
2113
3100
3102
3105
3101
3352
3354
3351
3353
3111
3112
3700
3114
3113
3701
3709
3712
6600
3610
2608
2604
2607
3609
3605
3602
2603
7608
7602
14
8
7607
1
7
2324
3304
3103
2117
2333
2332
2419
2317
3303
3104
2124
2416
2109
2412
2420
2421
2418
2411
2415
2422
2417
2403
2400

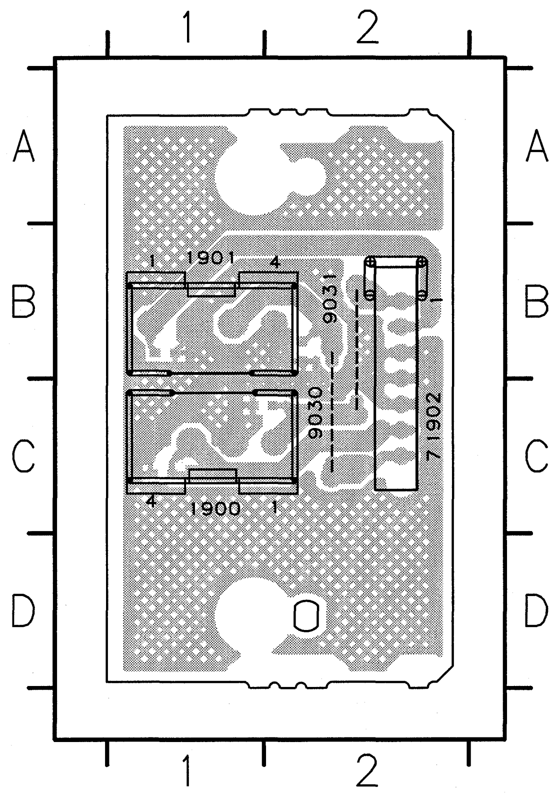
2109	J2
2110	D6
2112	D6
2113	D7
2114	D6
2117	I7
2124	J7
2131	B6
2136	B6
2314	D2
2315	D2
2317	J4
2322	D3
2324	H5
2326	D2
2331	B2
2332	I2
2333	J1
2336	B2
2400	J7
2403	J7
2411	J3
2412	J2
2415	J3
2416	J1
2417	J3
2418	J3
2419	J3
2420	J2
2421	J2
2422	J3
2603	H3
2604	G2
2607	H3
2608	G1
3100	E6
3101	E7
3102	E6
3103	I6
3104	J6
3105	E6
3110	A4
3111	F5
3112	F5
3113	F7
3114	F7
3300	E2
3301	E3
3302	E2
3303	J5
3304	H5
3305	E2
3351	F2
3352	F3
3353	F2
3354	F3
3602	H3
3605	H3
3609	H3
3610	G1
3700	F5
3701	F7
3709	G5
3712	G7
6600	G2
7602	H4
7607	H2
7608	H4

AMP SOCKET BOARD - Circuit Diagram

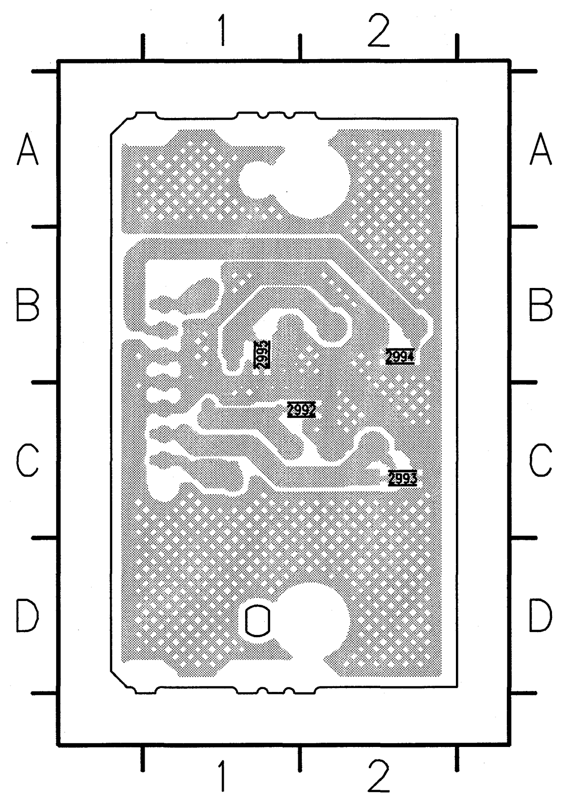

1
2
3
A
B
C
1902
Panel Left -
Panel Right +
Sub Left -
Sub Right +
1
2
3
4
5
6
7
WH07D-1
To HAS-AMP
2992
33n
2993
33n
2994
33n
2995
33n
To Left LSB
1900
Panel Left -
Sub Left -
B4P-VH
1901
Panel Right +
Sub Right +
B4P-VH
To Right LSB
A96

1900	**B3**
1901	**B3**
1902	**B1**
2992	**B2**
2993	**B2**
2994	**B2**
2995	**B2**

AMP SOCKET BOARD - Layout Diagram


1
2
A
B
C
D
1901
1
4
9031
9030
1900
4
1
7 1902

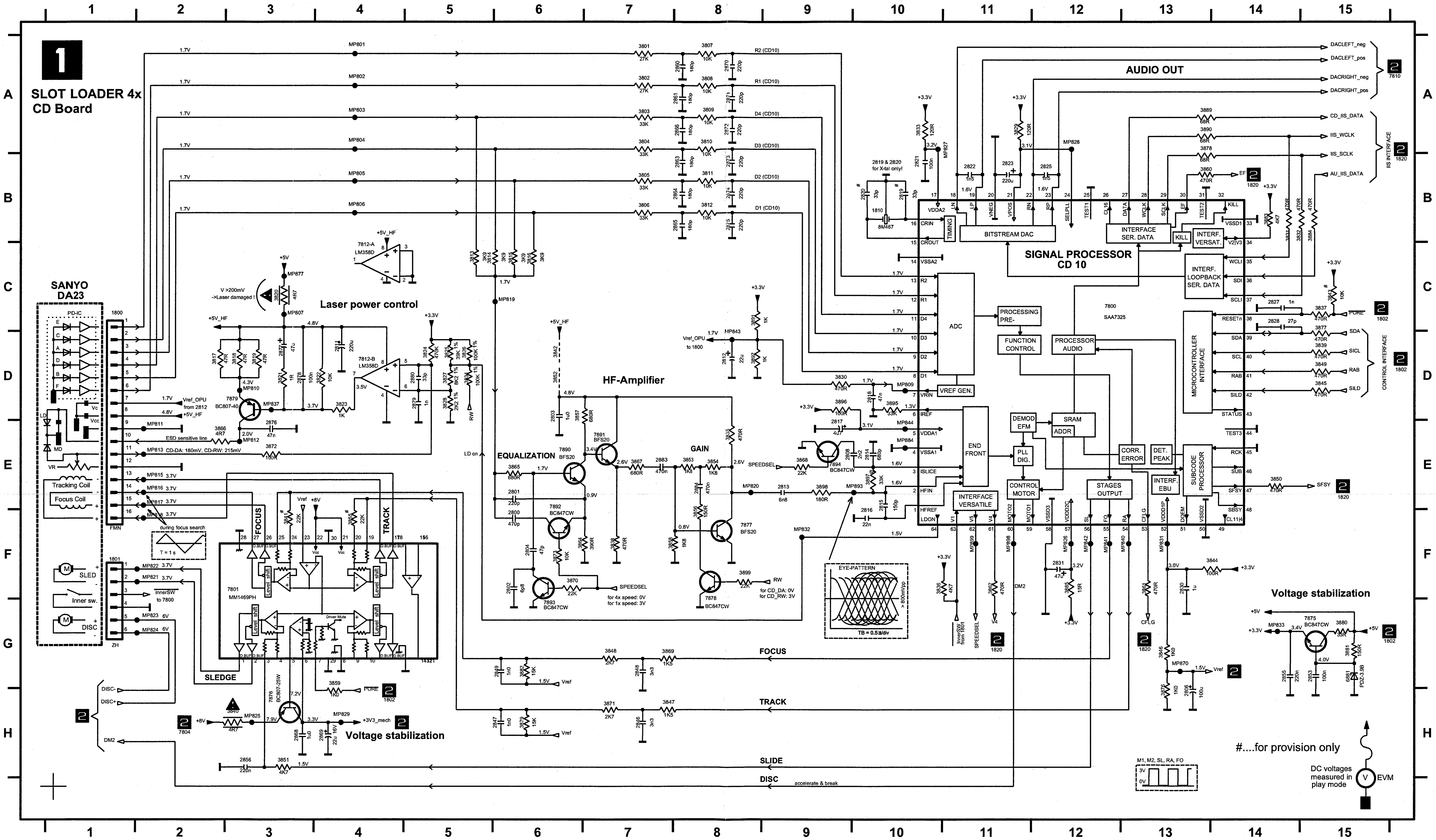
1900	C1
1901	B1
1902	C2
9030	C2
9031	B2


1
2
A
B
C
D
2995
2994
2992
2993

2992	C2
2993	C2
2994	B2
2995	B1

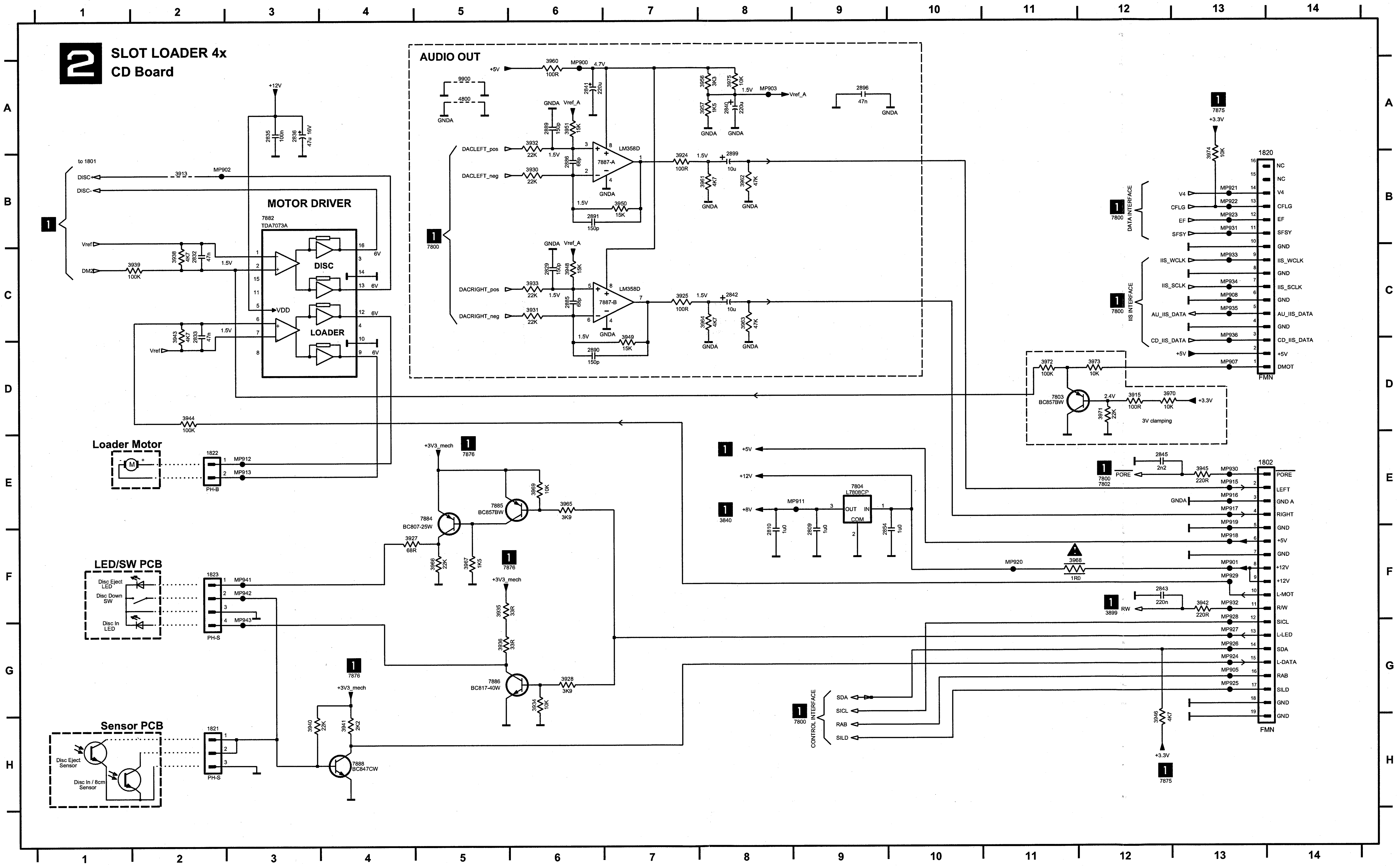
SLOT CD LOADER BOARD - Circuit Diagram (part 1)

1800	C1
1801	F1
1810	B10
2800	F6
2801	E6
2802	F6
2803	D6
2804	F6
2806	H13
2808	E9
2811	D4
2812	D8
2813	E9
2814	E10
2815	E10
2816	F10
2817	E9
2818	D10
2819	B10
2820	B10
2821	B10
2822	B11
2823	B11
2825	B12
2827	C14
2828	C14
2830	F13
2831	F12
2846	H7
2847	H5
2848	G7
2849	G6
2853	G15
2855	G14
2856	H3
2860	A8
2861	A8
2863	B8
2864	B8
2865	B8
2866	A7
2868	H3
2869	H4
2870	A8
2871	A8
2872	A8
2873	B8
2874	B8
2875	B8
2876	E3
2877	D3
2878	D3
2879	D5
2880	D5
2883	E7
2884	E8
3801	A7
3802	A7
3803	A7
3804	A7
3805	B7
3806	B7
3807	A8
3808	A8
3809	A8
3810	A8
3811	B8
3812	B8
3813	C5
3814	C5
3815	C6
3816	C6
3817	D2
3818	D3
3819	D3
3820	C3
3821	D3
3822	D4
3823	D4
3824	D5
3825	D5
3826	D5
3827	D5
3828	D5
3829	A11
3830	D9
3831	B14
3832	B15
3833	A10
3834	D5
3835	E8
3836	F10
3837	C15
3838	F7
3839	D15
3840	H3
3841	F3
3842	D6
3843	C15
3844	F14
3845	D15
3846	G13
3847	H7
3848	G7
3849	D15
3850	E14
3851	H3
3852	D6
3853	E8
3854	E8
3855	F4
3856	F8
3857	D6
3858	F7
3859	G4
3860	B13
3861	F13
3862	F11
3864	F6
3865	E6
3866	E2
3867	E7
3868	E9
3869	G7
3870	F6
3871	H7
3872	E3
3873	F6
3876	H13
3877	C15
3878	A13
3879	H6
3880	G15
3881	G15
3882	G6
3883	B14
3884	B15
3885	F12
3889	A13
3890	A13
3891	C8
3892	D8
3895	D10
3896	D9
3897	E10
3898	E9
3899	F8
6881	G15
7800	C12
7801	F3
7812-A	C4
7812-B	D4
7875	G15
7876	H3
7877	F8
7878	G8
7879	D3
7890	E6
7891	E7
7892	E6
7893	G6
7894	E9
MP801	A4
MP802	A4
MP803	A4
MP804	A4
MP805	B4
MP806	B4
MP807	C3
MP809	D10
MP810	D3
MP811	E2
MP812	E3
MP813	E2
MP815	E2
MP816	E2
MP817	E2
MP818	F2
MP819	C6
MP820	E8
MP821	F2
MP822	F2
MP823	G2
MP824	G2
MP825	H3
MP826	F12
MP827	A10
MP828	A12
MP829	H4
MP831	F13
MP832	F9
MP833	G14
MP837	D3
MP840	F13
MP841	F12
MP842	F12
MP843	D8
MP844	E10
MP870	G13
MP877	C3
MP884	E10
MP893	E10
MP898	F11
MP899	F11

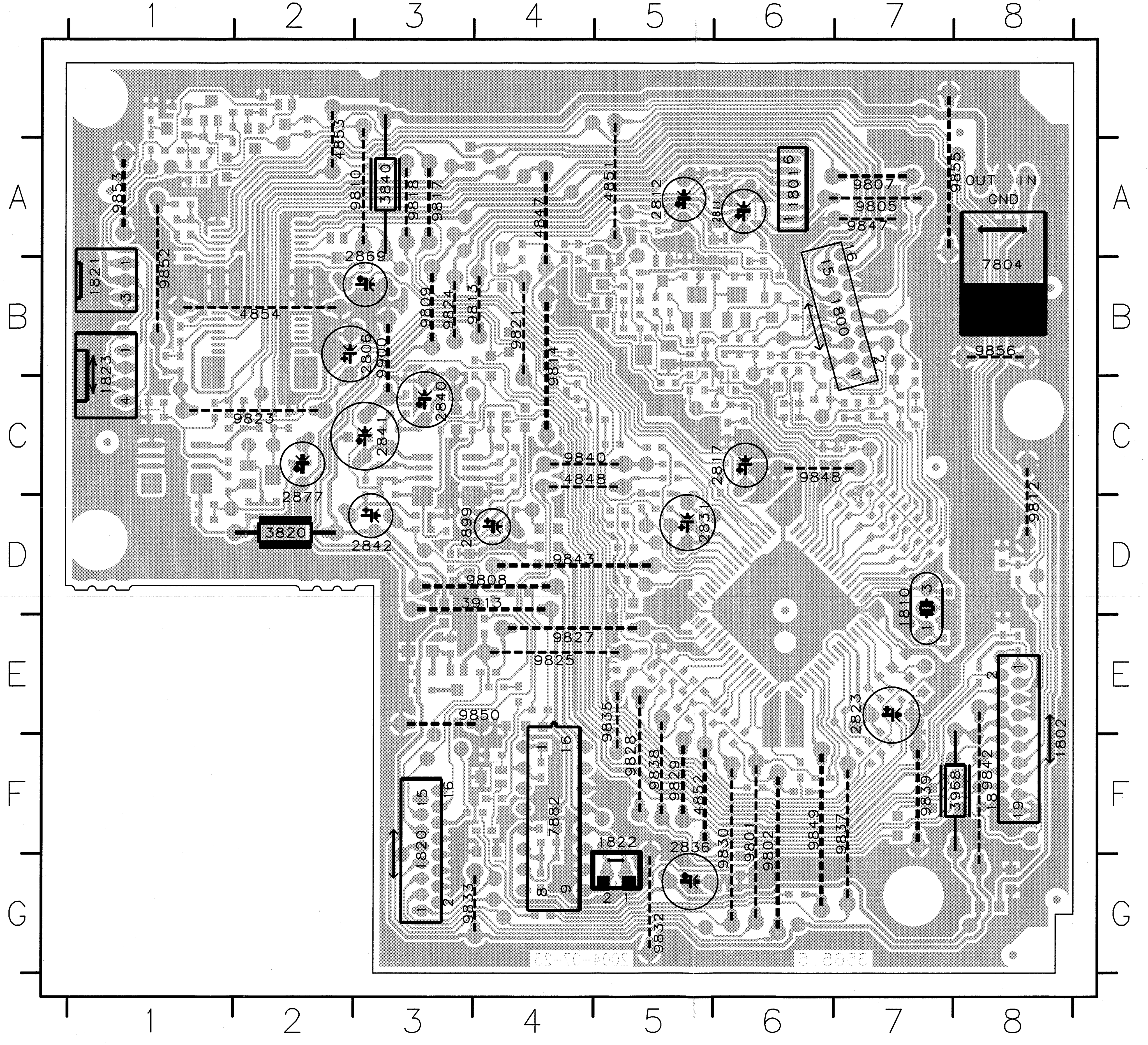

1
SLOT LOADER 4x
CD Board
SANYO
DA23
PD-IC
Tracking Coil
Focus Coil
SLED
Inner sw.
DISC
Laser power control
V >200mV
->Laser damaged !
7812-A
LM358D
7812-B
LM358D
7879
BC807-40
ESD sensitive line
CD-DA: 180mV, CD-RW: 215mV
during focus search
T = 1 s
HF-Amplifier
EQUALIZATION
GAIN
7890
BFS20
7891
BFS20
7892
BC847CW
7893
BC847CW
7877
BFS20
7878
BC847CW
7894
BC847CW
SPEEDSEL
for 4x speed: 0V
for 1x speed: 3V
RW
for CD_DA: 0V
for CD_RW: 3V
LD on
Vref_OPU
FOCUS
TRACK
7801
MM1469PH
Level shift
Driver Mute
SLEDGE
SLIDE
DISC
accelerate & break
Voltage stabilization
+3V3_mech
7876
BC807-25W
EYE-PATTERN
> 800mVpp
TB = 0.5µs/div
AUDIO OUT
DACLEFT_neg
DACLEFT_pos
DACRIGHT_neg
DACRIGHT_pos
CD_IIS_DATA
IIS_WCLK
IIS_SCLK
AU_IIS_DATA
IIS INTERFACE
CONTROL INTERFACE
SIGNAL PROCESSOR
CD 10
7800
SAA7325
BITSTREAM DAC
TIMING
INTERFACE SER. DATA
KILL
INTERF. VERSAT.
INTERF. LOOPBACK SER. DATA
PROCESSING PRE-
FUNCTION CONTROL
PROCESSOR AUDIO
ADC
VREF GEN.
DEMOD EFM
SRAM
ADDR
END FRONT
PLL DIG.
CORR. ERROR
DET. PEAK
SUBCODE PROCESSOR
INTERF. EBU
CONTROL MOTOR
STAGES OUTPUT
INTERFACE VERSATILE
MICROCONTROLLER INTERFACE
PORE
SDA
SICL
RAB
SILD
SFSY
EF
CFLG
7875
BC847CW
PDZ-3.9B
M1, M2, SL, RA, FO
#....for provision only
DC voltages measured in play mode
EVM

SLOT CD LOADER BOARD - Circuit Diagram (part 2)

1802	E13
1820	B13
1821	H2
1822	E2
1823	F2
2809	F9
2810	F8
2829	C6
2832	C2
2833	C2
2835	A3
2836	A3
2840	A8
2841	A6
2842	C8
2843	F12
2845	E12
2854	F9
2885	C6
2886	B6
2889	A6
2890	D6
2891	B6
2896	A9
2899	B8
3913	B2
3915	D12
3924	B7
3925	C7
3927	F4
3928	G6
3930	B6
3931	C6
3932	A6
3933	C6
3934	G6
3935	F5
3936	G5
3938	C2
3939	C2
3940	H3
3941	H4
3942	F13
3943	C2
3944	D2
3945	E13
3946	H12
3948	C6
3949	C7
3950	B7
3951	A6
3956	A8
3957	A8
3960	A6
3961	B8
3962	B8
3963	C8
3964	C8
3965	E6
3966	F5
3967	F5
3968	F11
3969	E6
3970	D12
3971	D12
3972	D11
3973	D12
3974	B13
3975	A8
4800	A5
7803	D11
7804	E9
7882	B3
7884	E5
7885	E5
7886	G5
7887-A	B6
7887-B	C6
7888	H4
9900	A5
MP900	A6
MP901	F13
MP902	B2
MP903	A8
MP905	G13
MP907	D13
MP908	C13
MP911	E9
MP912	E3
MP913	E3
MP915	E13
MP916	E13
MP917	E13
MP918	F13
MP919	E13
MP920	F11
MP921	B13
MP922	B13
MP923	B13
MP924	G13
MP925	G13
MP926	G13
MP927	G13
MP928	F13
MP929	F13
MP930	E13
MP931	B13
MP932	F13
MP933	C13
MP934	C13
MP935	C13
MP936	C13
MP941	F3
MP942	F3
MP943	F3

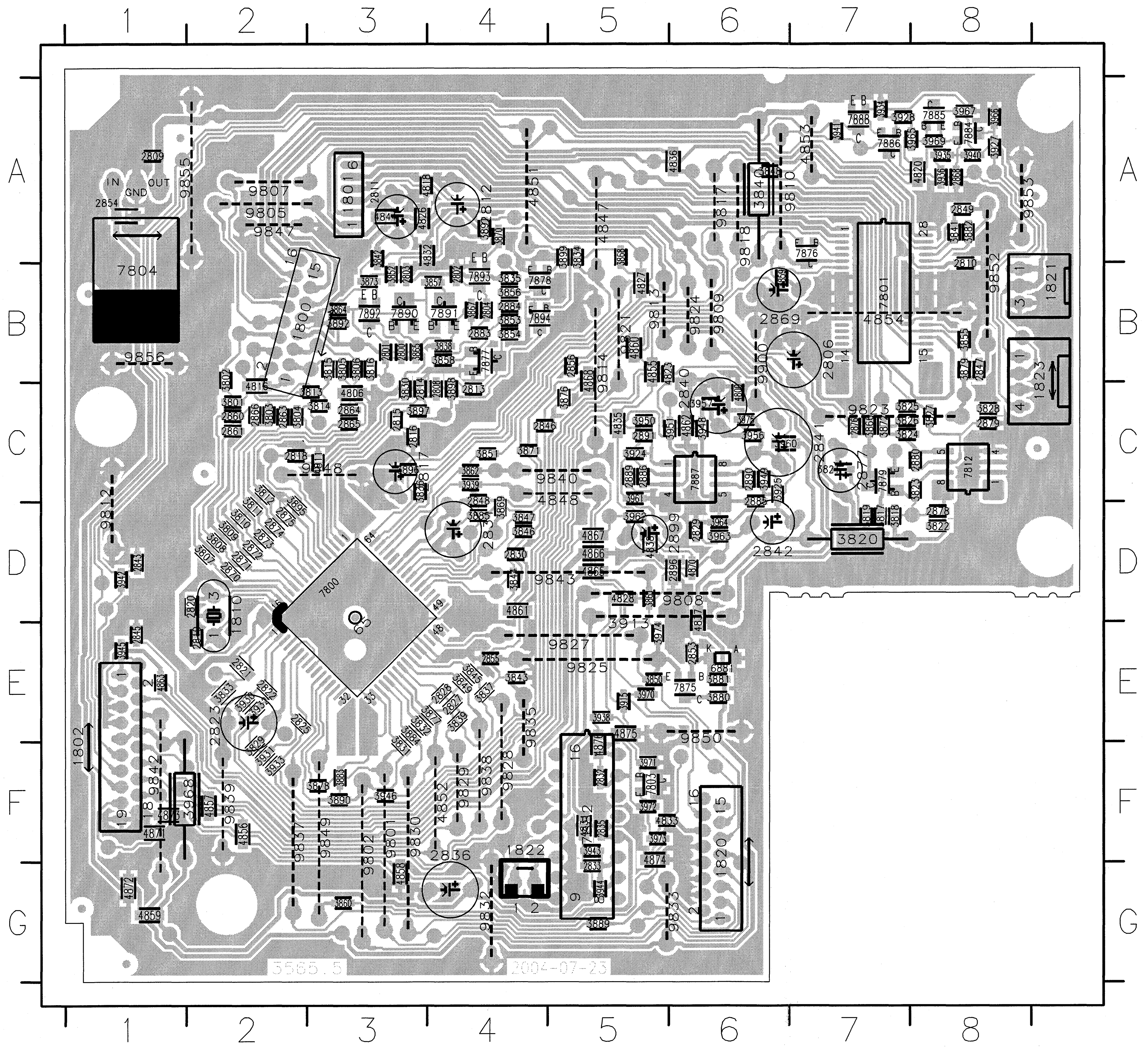

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
2
SLOT LOADER 4x
CD Board
+12V
2835 100n
2836 47u 16V
to 1801
DISC+
DISC-
3913
MP902
1
Vref
DM2
3939 100K
3938 4K7
2832 47n
1.5V
MOTOR DRIVER
7882
TDA7073A
DISC
LOADER
VDD
16
3
14
13
12
4
10
9
6V
3943 4K7
2833 47n
3944 100K
AUDIO OUT
+5V
3960 100R
MP900
4.7V
2841 220u
9900
4800
GNDA
Vref_A
2889 150p
3951 15K
DACLEFT_pos
DACLEFT_neg
3932 22K
3930 22K
2886 68p
LM358D
7887-A
3950 15K
2891 150p
3924 100R
2899 10u
3961 4K7
3962 47K
3956 3K3
3975 10K
3957 1K5
2840 220u
MP903
Vref_A
2896 47n
7800
2829 150p
3948 15K
DACRIGHT_pos
DACRIGHT_neg
3933 22K
3931 22K
2885 68p
7887-B
3949 15K
2890 150p
3925 100R
2842 10u
3964 4K7
3963 47K
7875
+3.3V
3974 10K
1820
DATA INTERFACE
V4
CFLG
EF
SFSY
GND
IIS INTERFACE
IIS_WCLK
IIS_SCLK
AU_IIS_DATA
CD_IIS_DATA
MP921
MP922
MP923
MP931
MP933
MP934
MP908
MP935
MP936
MP907
NC
DMOT
FMN
3972 100K
3973 10K
7803 BC857BW
2.4V
3915 100R
3970 10K
3971 22K
3V clamping
Loader Motor
M
1822
MP912
MP913
PH-B
+3V3_mech
7876
3969 10K
7885 BC857BW
3965 3K9
7884 BC807-25W
3927 68R
3966 22K
3967 1K5
LED/SW PCB
Disc Eject LED
Disc Down SW
Disc In LED
1823
MP941
MP942
MP943
PH-S
3935 33R
3936 33R
7886 BC817-40W
3928 3K9
3934 10K
Sensor PCB
Disc Eject Sensor
Disc In / 8cm Sensor
1821
3940 22K
3941 2K2
7888 BC847CW
+5V
+12V
+8V
3840
MP911
7804 L7808CP
OUT IN COM
2810 1u0
2809 1u0
2854 1u0
2845 2n2
PORE
7802
3945 220R
MP930
1802
MP915
MP916
MP917
MP919
MP918
MP920
3968 1R0
MP901
MP929
2843 220n
RW
3899
3942 220R
MP932
MP928
MP927
MP926
MP924
MP905
MP925
PORE
LEFT
GND A
RIGHT
+12V
L-MOT
R/W
SICL
L-LED
SDA
L-DATA
RAB
SILD
CONTROL INTERFACE
3946 4K7

SLOT CD LOADER BOARD - Layout Diagram (side A)

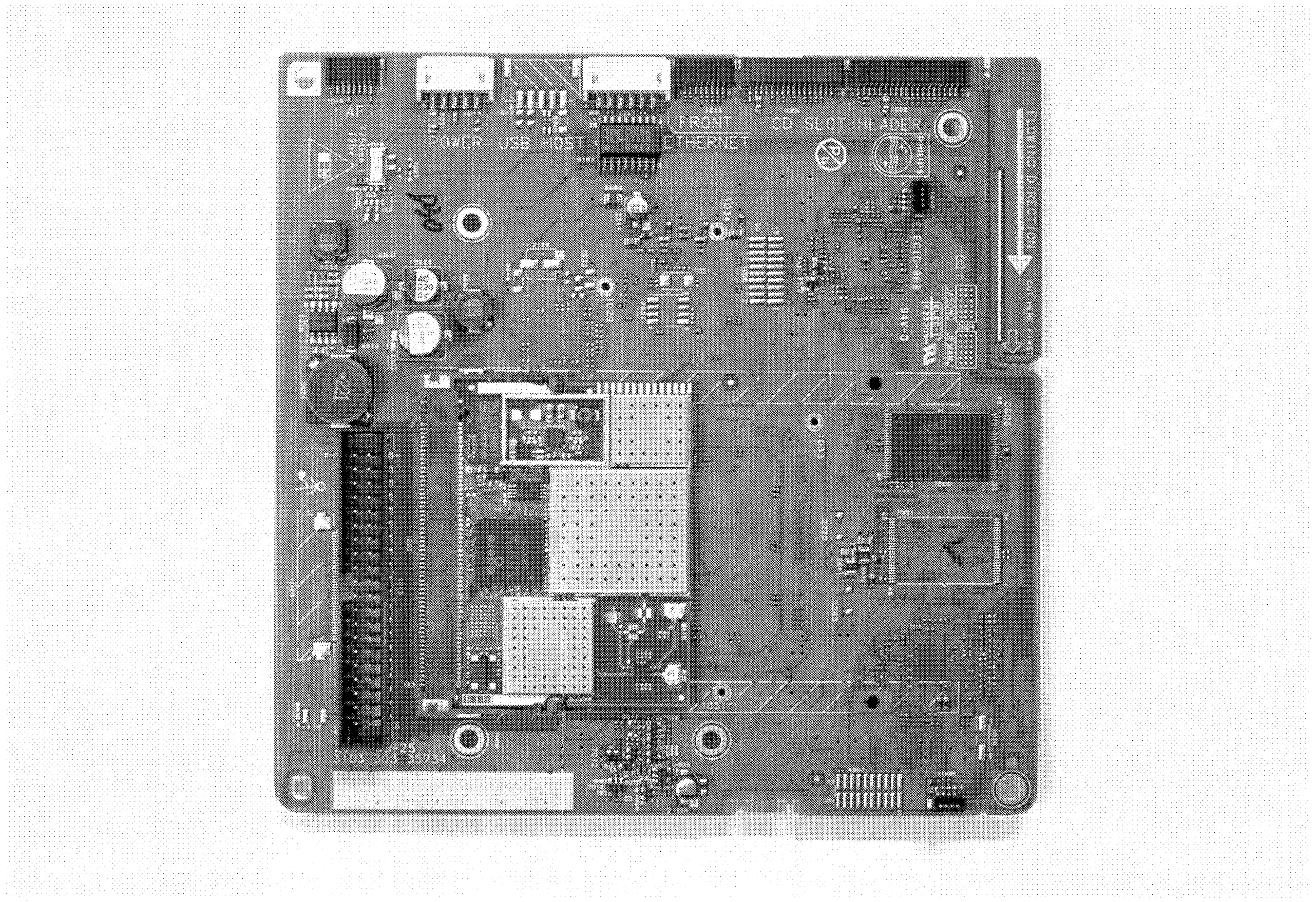

1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
9853
4853
9810
3840
9818
9817
4847
4851
2812
2811
18016
9807
9805
9847
9855
OUT
IN
GND
7804
1821
9852
2869
4854
9809
9824
9813
9821
9814
1800
1823
2806
9900
2840
9823
2841
9856
2877
2842
3820
2899
9840
4848
2817
9848
2831
9812
9843
9808
3913
9827
9825
1810
9850
9835
9828
9838
9829
4852
2823
1802
1820
7882
1822
2836
9830
9801
9802
9849
9837
9839
3968
9842
9833
9832

1800	B7
1801	A6
1802	F8
1810	D7
1820	F3
1821	B1
1822	F5
1823	B1
2806	B3
2811	A6
2812	A5
2817	C6
2823	E7
2831	D5
2836	F5
2840	C3
2841	C3
2842	D3
2869	A3
2877	D2
2899	D3
3820	D2
3840	A3
3913	D4
3968	F8
4847	A4
4848	C4
4851	A5
4852	F5
4853	A2
4854	B2
7804	B8
7882	F4
9801	F6
9802	F6
9805	A7
9807	A7
9808	D4
9809	B3
9810	A3
9812	D8
9813	B3
9814	B4
9817	A3
9818	A3
9821	B4
9823	C2
9824	B3
9825	E4
9827	E4
9828	F5
9829	F5
9830	F6
9832	G5
9833	G3
9835	E5
9837	F7
9838	F5
9839	F7
9840	C4
9842	F8
9843	D4
9847	A7
9848	C6
9849	F6
9850	E4
9852	B1
9853	A1
9855	A8
9856	B8
9900	B3

SLOT CD LOADER BOARD - Layout Diagram (side B)



2800	B3	3805	B3	3872	C7	4806
2801	B3	3806	B3	3873	B3	4811
2802	B4	3807	D2	3876	C5	4816
2803	B3	3808	D2	3877	E4	4818
2804	B4	3809	D2	3878	F3	4820
2808	C4	3810	D2	3879	B8	4823
2809	A1	3811	D2	3880	E6	4826
2810	B8	3812	C2	3881	E6	4827
2813	C4	3813	C3	3882	A8	4828
2814	C3	3814	C3	3883	F3	4831
2815	C3	3815	B3	3884	E3	4832
2816	C3	3816	B3	3885	D4	4833
2818	C2	3817	D7	3889	G5	4835
2819	E2	3818	D7	3890	F3	4836
2820	D2	3819	D7	3891	A4	4837
2821	E2	3821	C7	3892	B3	4838
2822	E2	3822	D8	3895	D2	4844
2825	E2	3823	C8	3896	C3	4855
2827	E4	3824	C7	3897	C3	4856
2828	E4	3825	C7	3898	C4	4857
2829	D6	3826	C7	3899	A5	4858
2830	D4	3827	C8	3915	E5	4859
2832	F5	3828	C8	3924	C5	4860
2833	G5	3829	F2	3925	C6	4861
2835	F5	3830	C3	3927	A8	4862
2843	D1	3831	F3	3928	A7	4863
2845	E1	3832	E3	3930	E2	4865
2846	C4	3833	E2	3931	F2	4866
2847	B8	3834	A5	3932	E2	4867
2848	C4	3835	B4	3933	F2	4868
2849	A8	3836	C3	3934	A7	4870
2853	E6	3837	E4	3935	A8	4871
2854	A1	3838	B4	3936	A8	4872
2855	E4	3839	E4	3938	E5	4873
2856	B5	3841	A8	3939	C4	4874
2860	C2	3842	A3	3940	A8	4875
2861	C2	3843	E4	3941	A7	4876
2863	C2	3844	D4	3942	D1	6881
2864	C3	3845	E4	3943	F5	7800
2865	C3	3846	D4	3944	G5	7801
2866	C2	3847	D4	3945	E1	7803
2868	A8	3848	A6	3946	F3	7812
2870	D2	3849	E4	3948	C6	7875
2871	D2	3850	E5	3949	C6	7876
2872	D2	3851	C4	3950	C5	7877
2873	D2	3852	B3	3951	C6	7878
2874	D2	3853	B4	3956	C6	7879
2875	D2	3854	B4	3957	C6	7884
2876	C7	3855	B8	3960	C6	7885
2878	D8	3856	B4	3961	C5	7886
2879	C8	3857	B4	3962	D5	7887
2880	C8	3858	B4	3963	D6	7888
2883	B4	3859	B6	3964	D6	7890
2884	B4	3860	G3	3965	A8	7891
2885	C6	3861	D5	3966	A8	7892
2886	C5	3862	C4	3967	A8	7893
2889	C5	3864	B3	3969	A8	7894
2890	C6	3865	B3	3970	E5	
2891	C5	3866	C7	3971	F5	
2896	D6	3867	B4	3972	F5	
3801	C2	3868	A5	3973	F5	
3802	B2	3869	D4	3974	E5	
3803	C2	3870	A4	3975	C6	
3804	C2	3871	C4	4800	C6	


AF
POWER
USB HOST
FRONT
ETHERNET
CD SLOT HEADER
FLOWING DIRECTION

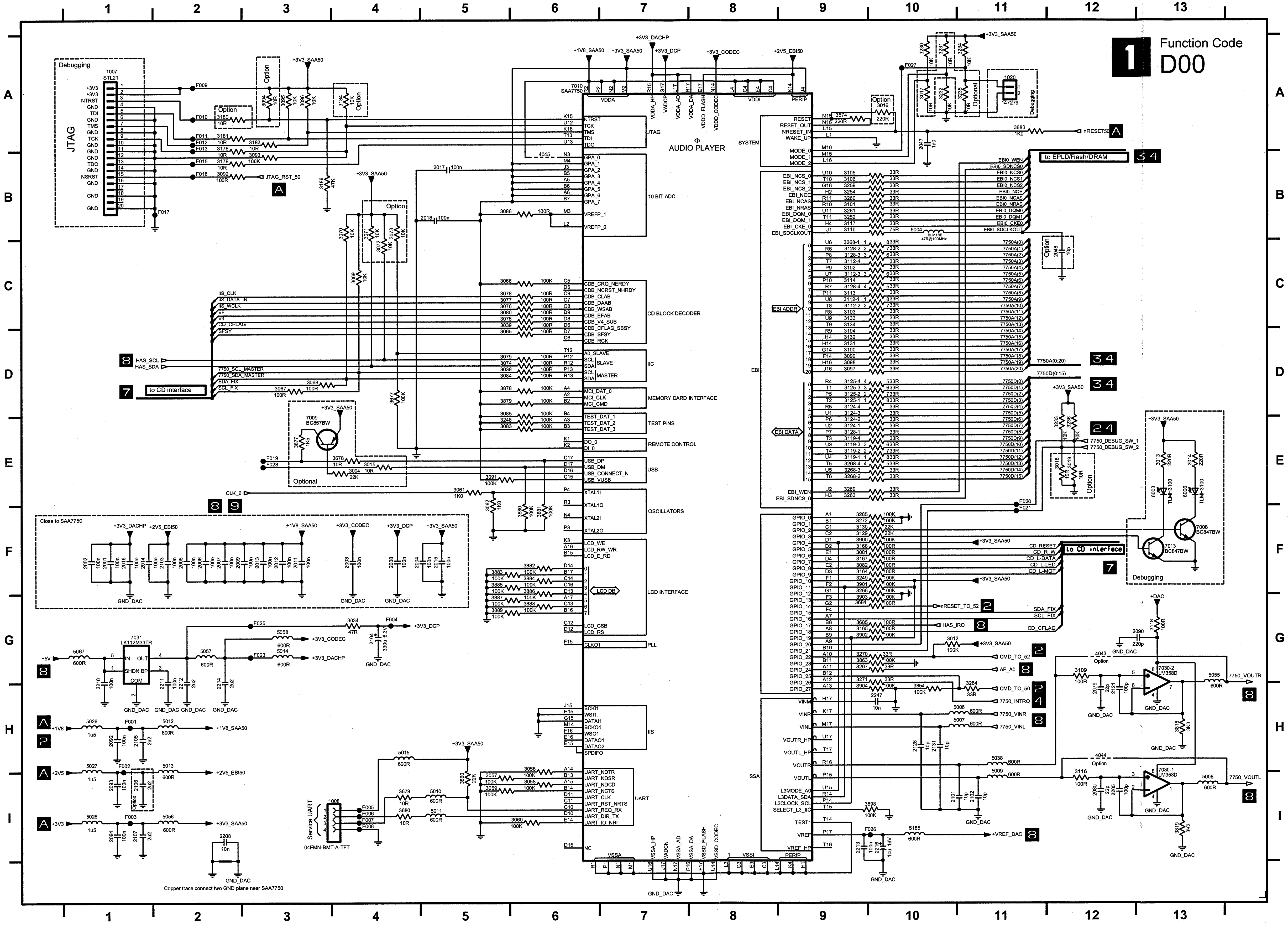
HAS MODULE

This module can only be repaired on component level at authorized service workshop.

In case of defects please replace the entire board resp. the WiFi Card.

3103 308 68101	HAS Printed Board Assembly
3103 308 84951	WiFi Card Mini PCI - Europe
3103 308 84961	WiFi Card Mini PCI - NAFTA
3103 308 84971	WiFi Card Mini PCI - OVERSEA

CIRCUIT DIAGRAM - Part 1


1
Function Code
D00
JTAG
Debugging
1007
STL21
+3V3
+3V3
NTRST
GND
TDI
GND
TMS
GND
TCK
GND
GND
GND
TDO
GND
NSRST
GND
GND
GND
JTAG_RST_50
A
Option
+3V3_SAA50
7010
SAA7750
AUDIO PLAYER
VDDA
VDDI
PERIP
JTAG
SYSTEM
10 BIT ADC
CD BLOCK DECODER
IIC
MEMORY CARD INTERFACE
TEST PINS
REMOTE CONTROL
USB
OSCILLATORS
LCD INTERFACE
PLL
IIS
UART
EBI
SSA
VSSA
VSSI
RESET
RESET_OUT
NRESET_IN
WAKE_UP
MODE_0
MODE_1
MODE_2
nRESET50
to EPLD/Flash/DRAM
3 4
EBI ADDR
EBI DATA
7750A(0:20)
7750D(0:15)
7750_DEBUG_SW_1
7750_DEBUG_SW_2
2 4
+1V8_SAA50
+3V3_DACHP
+3V3_DCP
+3V3_CODEC
+2V5_EBI50
IIS_CLK
IIS_DATA_IN
IIS_WCLK
HAS_SCL
HAS_SDA
8
7
to CD interface
7750_SCL_MASTER
7750_SDA_MASTER
SDA_FIX
SCL_FIX
7009
BC857BW
Optional
CLK_6
8 9
Close to SAA7750
GND_DAC
7031
LK112M33TR
+5V
+1V8
+2V5
+3V3
Service UART
1008
04FMN-BMT-A-TFT
Copper trace connect two GND plane near SAA7750
CD_RESET
CD_R_W
CD_L-DATA
CD_L-LED
CD_L-MOT
to CD interface
nRESET_TO_52
HAS_IRQ
CD_CFLAG
CMD_TO_52
AF_A0
CMD_TO_50
7750_INTRQ
7750_VINR
7750_VINL
+VREF_DAC
7013
BC847BW
7008
BC847BW
6003
TLMH3100
6006
TLMH3100
Debugging
+DAC
7030-2
LM358D
7030-1
LM358D
7750_VOUTR
7750_VOUTL
1020
147279
1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I

1007	A1
1008	I4
1020	A11
2001	F1
2002	F1
2003	F4
2004	F4
2005	F2
2006	F2
2007	F2
2008	F4
2009	F2
2011	F3
2012	F3
2013	F3
2014	F1
2015	F5
2016	F1
2017	B5
2018	B5
2047	A10
2048	C12
2079	H12
2080	I12
2090	G13
2092	H1
2093	I1
2094	I1
2101	I10
2102	I11
2103	F2
2104	G4
2105	H1
2106	I1
2107	I1
2121	H12
2128	H10
2131	H10
2205	I12
2208	I2
2210	G1
2211	G2
2212	G2
2213	I9
2214	G2
2216	I10
2247	H10
3004	E4
3012	G10
3013	E13
3014	E13
3015	E4
3016	A10
3017	A10
3018	E12
3019	E12
3034	G4
3038	D5
3039	C5
3056	H6
3057	I5
3058	I6
3059	I5
3060	I6
3061	E5
3062	E5
3065	D5
3066	C5
3067	D3
3068	D3
3069	C4
3070	B4
3071	B4
3072	C4
3073	B4
3074	D5
3075	C5
3076	C5
3077	C5
3078	C5
3079	D5
3080	C5
3081	F9
3082	F9
3083	E5
3084	D5
3085	D5
3086	B5
3091	E5
3092	B2
3093	B3
3094	A3
3095	A3
3096	A3
3097	D9
3098	D9
3099	D9
3100	D9
3101	B9
3102	C9
3103	C9
3104	D9
3105	B9
3106	B9
3109	G12
3110	B9
3112-1	C9
3112-2	C9
3112-3	C9
3112-4	C9
3113	C9
3114	C9
3116	I12
3117	B9
3118	G13
3119-1	E9
3119-2	E9
3119-3	E9
3119-4	E9
3124-1	E9
3124-2	E9
3124-3	D9
3124-4	D9
3125-1	D9
3125-2	D9
3125-3	D9
3125-4	D9
3128-1	E9
3128-2	C9
3128-3	C9
3128-4	C9
3129	F9
3130	F9
3131	D9
3132	D9
3133	C9
3134	C9
3164	F9
3165	G9
3166	F9
3167	F9
3178	A2
3179	B2
3180	A2
3181	A2
3182	A3
3184	A4
3186	B3
3230	A10
3231	A10
3232	A10
3233	E12
3234	A11
3235	A11
3236	E12
3248	E5
3249	F9
3252	B9
3254	B9
3259	B9
3260	B9
3261	B9
3263	E9
3264	H11
3265	F9
3266	F9
3267	G9
3268-1	C9
3268-2	E9
3268-3	E9
3268-4	E9
3269	E9
3270	G9
3271	G9
3272	F9
3677	D4
3678	E4
3679	I4
3680	I4
3683	A11
3684	G9
3685	G9
3818	H13
3819	I13
3854	H10
3860	I5
3863	G9
3874	A9
3877	E3
3878	D5
3879	D5
3880	F6
3881	F6
3882	F6
3883	F5
3884	F6
3885	F5
3886	F6
3887	G5
3888	G6
3889	G5
3898	I10
3900	F9
3901	F9
3902	G9
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3904	H9
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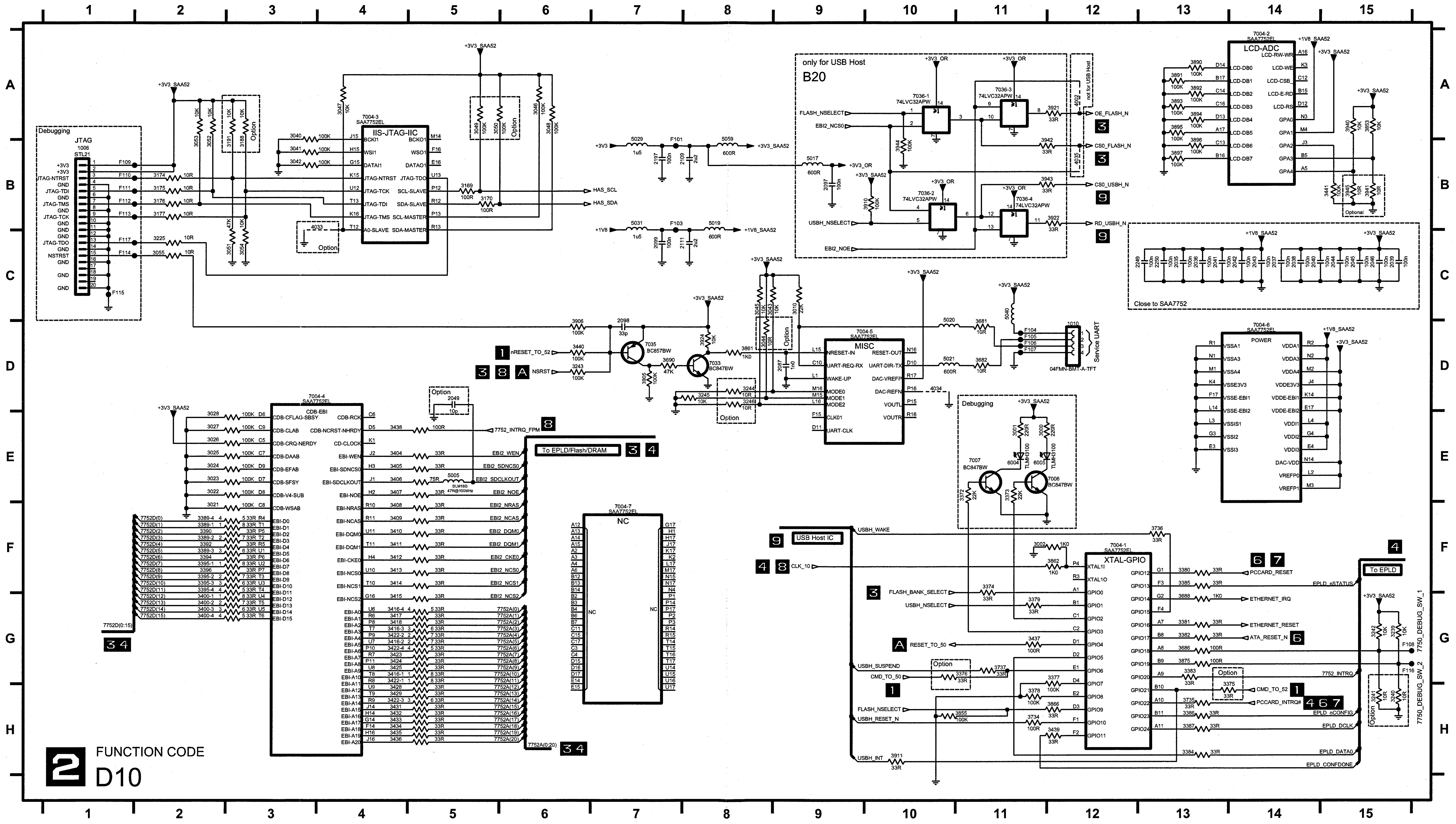
4044	H12
4045	B6
5004	B10
5006	H11
5007	H11
5008	I13
5009	I11
5010	I5
5011	I5
5012	H2
5013	H2
5014	G3
5015	H4
5026	H1
5027	H1
5028	I1
5038	H11
5055	G13
5056	I2
5057	G2
5058	G3
5067	G1
5185	I10
6003	E13
6006	E13
7008	F13
7009	E3
7010	A6
7013	F13
7030-1	I13
7030-2	G13
7031	G1
F001	H1
F002	H1
F003	I1
F004	G4
F005	I4
F006	I4
F007	I4
F008	I4
F009	A2
F010	A2
F011	A2
F012	A2
F013	A2
F015	B2
F016	B2
F017	B2
F019	E3
F020	E11
F021	F11
F023	G3
F025	G3
F026	I10
F027	A10
F028	E3

CIRCUIT DIAGRAM - Part 2

1006 B1
1010 D12
2035 C13
2036 C13
2037 C14
2038 C14
2039 C15
2040 C14
2041 C13
2042 C14
2043 C14
2044 C15
2045 C15
2046 C15
2049 D5
2087 D9
2097 B9
2098 D7
2099 C7
2109 B7
2111 C7
2197 B7
2249 C13
2250 C13
3000 E11
3001 E11
3002 F11
3010 C9
3021 F2
3022 E2
3023 E2
3024 E2
3025 E2
3026 E2
3027 E2
3028 E2
3040 A3
3041 B3
3042 B3
3043 C8
3044 D8
3045 C8
3046 A6
3047 A4
3048 A6
3049 A5
3050 A5
3051 C3
3052 B2
3053 B2
3054 C3
3055 C2
3169 B5
3170 B5
3174 B2
3175 B2
3176 B2
3177 B2
3188 B3
3191 B3
3225 C2
3239 G15
3240 H15
3241 H15
3242 G15
3243 D6
3244 D8
3245 D8
3246 D8
3372 E11
3373 E11
3374 F11
3375 H14
3376 G11
3377 G12
3378 H11
3379 G11
3380 F13
3381 G13
3382 G13
3383 G13
3384 H13
3385 F13
3386 H13
3387 H13
3389-1 F2
3389-2 F2
3389-3 F2
3389-4 F2
3390 F2
3392 F2
3394 F2
3395-1 F2
3395-2 F2
3395-3 F2
3395-4 F2
3396 F2
3400-1 G2
3400-2 G2
3400-3 G2
3400-4 G2
3404 E4
3405 E4
3406 E4
3407 E4
3408 F4
3409 F4
3410 F4
3411 F4
3412 F4
3413 F4
3414 F4
3415 G4
3416-1 G4
3416-2 G4
3416-3 G4
3416-4 G4
3417 G4
3418 G4
3422-1 G4
3422-2 G4
3422-3 H4
3422-4 G4
3423 G4
3424 G4
3425 G4
3428 H4
3429 H4
3431 H4
3432 H4
3433 H4
3434 H4
3435 H4
3436 H4
3437 G11
3438 E4
3439 H12
3440 D6
3441 B15
3681 D11
3682 D11
3686 G13
3688 G13
3690 D7
3734 H11
3735 H13
3736 F13
3737 G11
3853 A15
3855 H11
3861 D8
3862 F12
3866 H12
3875 G13
3890 A13
3891 A13
3892 A13
3893 A13
3894 A13
3895 A13
3896 B13
3897 B13
3905 D7
3906 D6
3910 B10
3911 H10
3921 A12
3922 B12
3924 D8
3940 A15
3941 B15
3942 B11
3943 B11
3944 B10
3945 B15
4002 A12
4033 B3
4034 D10
4035 B12
5005 E5
5017 B9
5019 B8
5020 D10
5021 D10
5029 B7
5031 B7
5040 C11
5059 B8
6004 E11
6005 E11
7004-1 F12
7004-2 A14
7004-3 A4
7004-4 D3
7004-5 D9
7004-6 D14
7004-7 F7
7006 E12
7007 E11
7033 D8
7035 D7
7036-1 A10
7036-2 B10
7036-3 A11
7036-4 B11
F101 B7
F103 B7
F104 D11
F105 D11
F106 D11
F107 D11
F108 G15
F109 B1
F110 B1
F111 B1
F112 B1
F113 B1
F114 C1
F115 C1
F116 G15
F117 C1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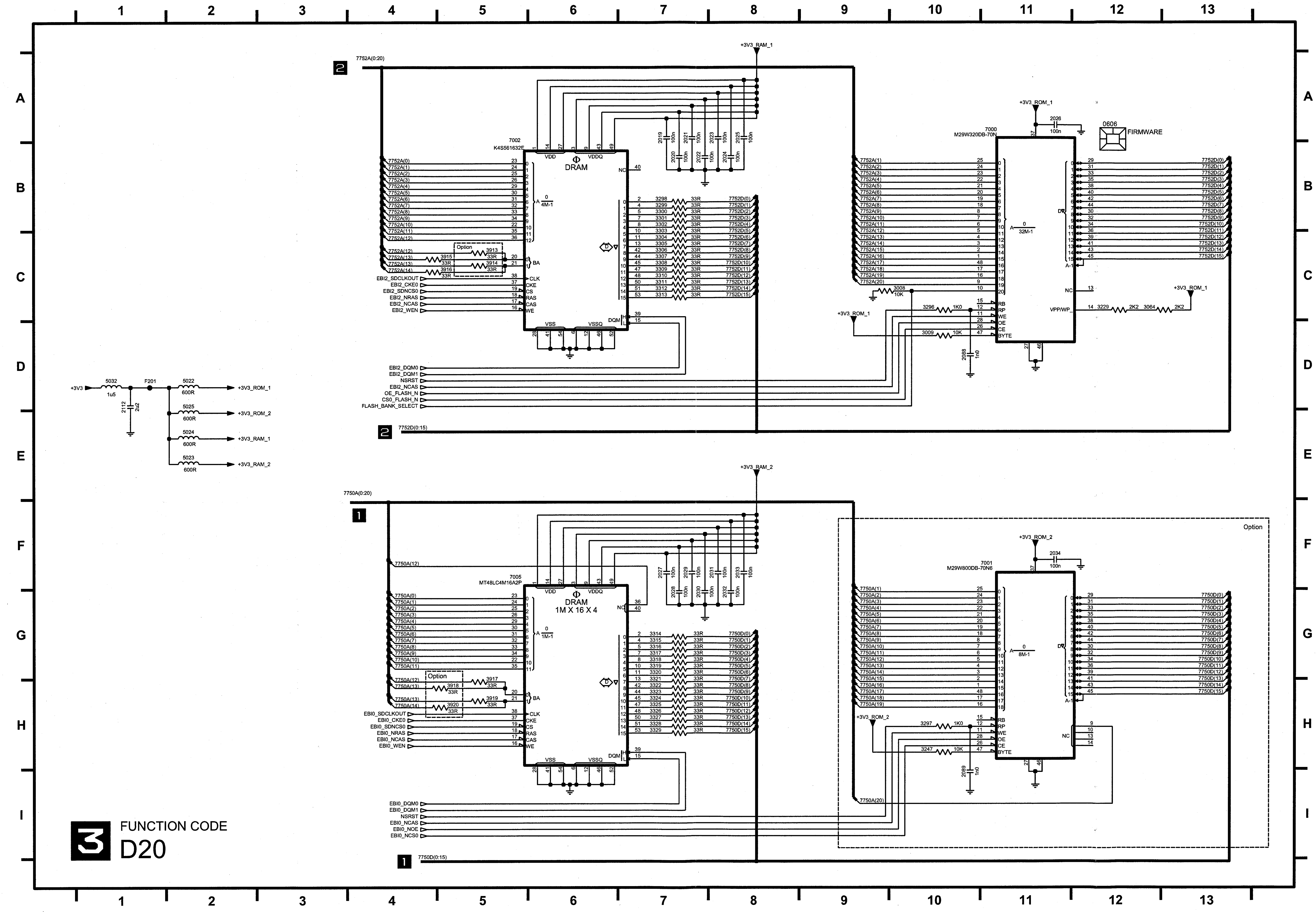
A B C D E F G H
Debugging
JTAG 1006 STL21
+3V3_SAA52
7004-3 SAA7752EL IIS-JTAG-IIC
HAS_SCL
HAS_SDA
Option
only for USB Host
B20
7036-1 74LVC32APW
7036-2 74LVC32APW
7036-3 74LVC32APW
7036-4 74LVC32APW
FLASH_NSELECT
EBI2_NCS0
USBH_NSELECT
EBI2_NOE
OE_FLASH_N
CS0_FLASH_N
CS0_USBH_N
RD_USBH_N
not for USB Host
7004-2 SAA7752EL LCD-ADC
Close to SAA7752
7004-5 SAA7752EL MISC
nRESET_TO_52
NSRST
7035 BC857BW
7033 BC847BW
04FMN-BMT-A-TFT
Service UART
7004-4 SAA7752EL CDB-EBI
7752_INTRQ_FPM
To EPLD/Flash/DRAM
7752D(0:15)
7752A(0:20)
7004-7 SAA7752EL NC
7004-6 SAA7752EL POWER
7007 BC847BW
7006 BC847BW
TLMH3100
USBH_WAKE
USB Host IC
CLK_10
7004-1 SAA7752EL XTAL-GPIO
FLASH_BANK_SELECT
USBH_SELECT
RESET_TO_50
USBH_SUSPEND
CMD_TO_50
FLASH_NSELECT
USBH_RESET_N
USBH_INT
PCCARD_RESET
ETHERNET_IRQ
ETHERNET_RESET
ATA_RESET_N
CMD_TO_52
PCCARD_INTRQ#
To EPLD
EPLD_nSTATUS
7752_INTRO
EPLD_nCONFIG
EPLD_DCLK
EPLD_DATA0
EPLD_CONFDONE
7750_DEBUG_SW_1
7750_DEBUG_SW_2
2
FUNCTION CODE
D10

CIRCUIT DIAGRAM - Part 3



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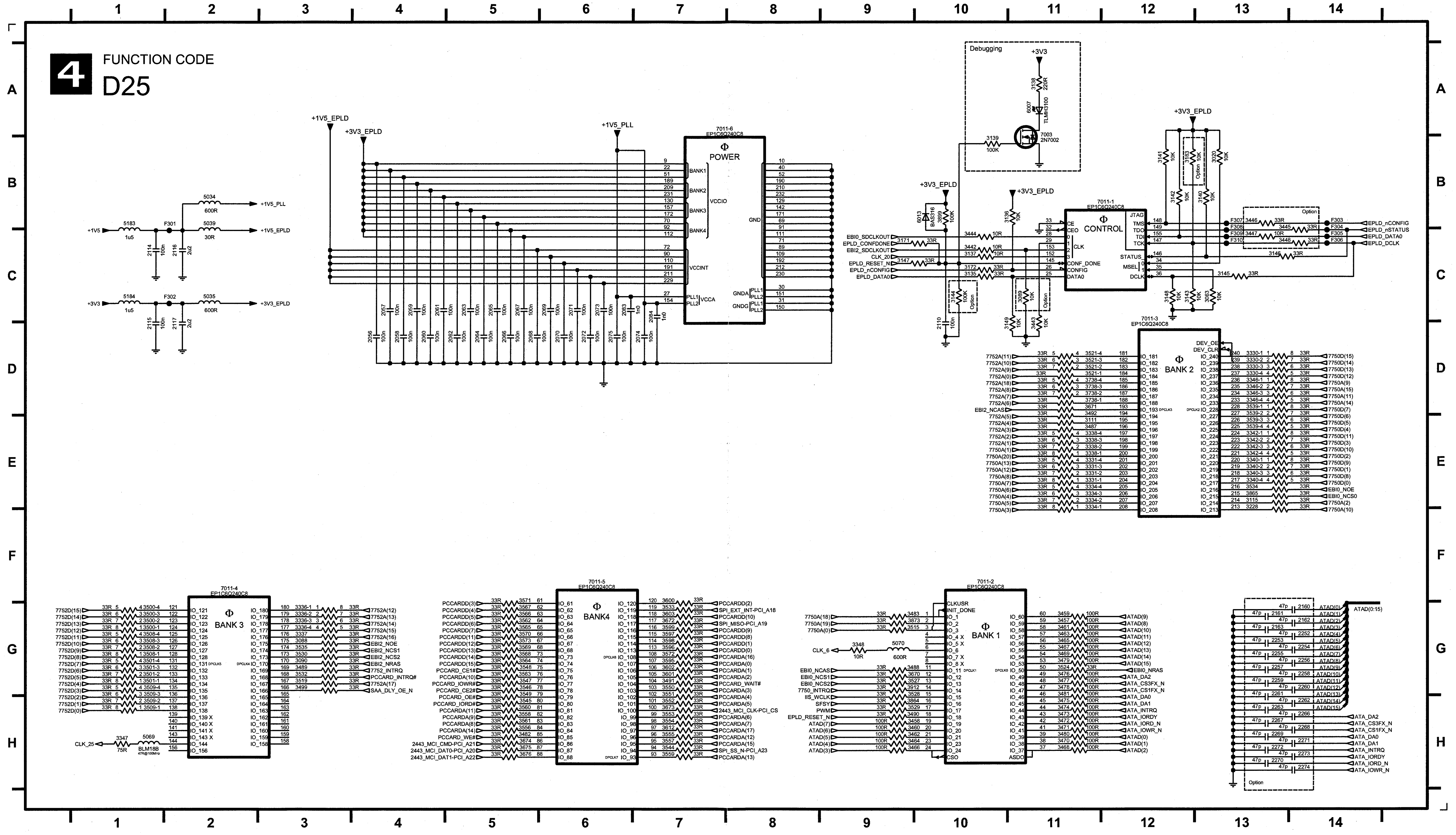
9
10
11
12
13
A
B
C
D
E
F
G
H
I
+3V3_RAM_1
7752A(0:20)
2
7002
K4S561632E
DRAM
VDD
VDDQ
VSS
VSSQ
NC
DQM
CLK
CKE
CS
RAS
CAS
WE
BA
4M-1
Option
3913
3914
3915
3916
33R
2019
2020
2021
2022
2023
2024
2025
100n
EBI2_SDCLKOUT
EBI2_CKE0
EBI2_SDNCS0
EBI2_NRAS
EBI2_NCAS
EBI2_WEN
EBI2_DQM0
EBI2_DQM1
NSRST
EBI2_NCAS
OE_FLASH_N
CS0_FLASH_N
FLASH_BANK_SELECT
7752D(0:15)
+3V3_ROM_1
2026
7000
M29W320DB-70N
0606
FIRMWARE
32M-1
RB
RP
WE
OE
CE
BYTE
VPP/WP
3008
10K
3296
1K0
3009
10K
2088
1n0
3229
2K2
3064
2K2
+3V3
5032
1u5
F201
2112
2u2
5022
600R
+3V3_ROM_1
5025
600R
+3V3_ROM_2
5024
600R
+3V3_RAM_1
5023
600R
+3V3_RAM_2
+3V3_RAM_2
7750A(0:20)
1
7750A(12)
7005
MT48LC4M16A2P
DRAM
1M X 16 X 4
1M-1
3917
3918
3919
3920
2027
2028
2029
2030
2031
2032
2033
EBI0_SDCLKOUT
EBI0_CKE0
EBI0_SDNCS0
EBI0_NRAS
EBI0_NCAS
EBI0_WEN
EBI0_DQM0
EBI0_DQM1
NSRST
EBI0_NCAS
EBI0_NOE
EBI0_NCS0
7750D(0:15)
Option
+3V3_ROM_2
2034
7001
M29W800DB-70N6
8M-1
+3V3_ROM_2
3297
1K0
3247
10K
2089
1n0
7750A(20)

3 FUNCTION CODE D20

0606	A12
2019	A7
2020	B7
2021	A7
2022	B7
2023	A8
2024	B8
2025	A8
2026	A11
2027	F7
2028	G7
2029	F7
2030	G7
2031	F8
2032	G8
2033	F8
2034	F11
2088	D10
2089	I10
2112	D1
3008	C10
3009	D10
3064	C12
3229	C12
3247	H10
3296	C10
3297	H10
3298	B7
3299	B7
3300	B7
3301	B7
3302	B7
3303	C7
3304	C7
3305	C7
3306	C7
3307	C7
3308	C7
3309	C7
3310	C7
3311	C7
3312	C7
3313	C7
3314	G7
3315	G7
3316	G7
3317	G7
3318	G7
3319	G7
3320	G7
3321	H7
3322	H7
3323	H7
3324	H7
3325	H7
3326	H7
3327	H7
3328	H7
3329	H7
3913	C5
3914	C5
3915	C5
3916	C5
3917	H5
3918	H5
3919	H5
3920	H5
5022	D2
5023	E2
5024	E2
5025	D2
5032	D1
7000	A11
7001	F11
7002	B5
7005	F5
F201	D1

CIRCUIT DIAGRAM - Part 4

2056 D4
2057 C4
2058 D4
2059 C4
2060 D4
2061 C4
2062 D5
2063 C5
2064 D5
2065 C5
2066 D5
2067 C5
2068 D5
2069 C6
2070 D6
2071 C6
2072 D6
2073 C6
2074 D7
2075 D6
2083 C6
2084 C7
2110 D10
2114 C1
2115 D1
2116 C2
2117 D2
2160 G14
2161 G13
2162 G14
2163 G13
2252 G14
2253 G13
2254 G14
2255 G13
2256 G14
2257 G13
2258 G14
2259 G13
2260 G14
2261 H13
2262 H14
2263 H13
2266 H14
2267 H13
2268 H14
2269 H13
2270 H13
2271 H14
2272 H13
2273 H14
2274 H14
3020 B13
3063 C13
3088 G3
3089 C11
3090 G3
3111 E11
3115 E13
3135 C10
3136 B11
3137 C10
3138 A11
3139 B10
3140 B13
3141 B12
3142 B12
3143 C12
3144 C10
3145 C13
3146 C13
3147 C9
3148 C12
3149 D11
3171 C9
3172 C10
3183 B12
3228 F13
3330-1 D13
3330-2 D13
3330-3 D13
3330-4 D13
3331-1 E11
3331-2 E11
3331-3 E11
3331-4 E11
3334-1 F11
3334-2 E11
3334-3 E11
3334-4 E11
3336-1 G3
3336-2 G3
3336-3 G3
3336-4 G3
3337 G3
3338-1 E11
3338-2 E11
3338-3 E11
3338-4 E11
3340-1 E13
3340-2 E13
3340-3 E13
3340-4 E13
3342-1 E13
3342-2 E13
3342-3 E13
3342-4 E13
3346-1 D13
3346-2 D13
3346-3 D13
3346-4 D13
3347 H1
3348 G9
3442 C10
3443 D11
3444 C10
3445 C13
3446 B13
3447 C13
3448 C13
3457 G11
3458 H9
3459 G11
3460 H9
3461 G11
3462 H9
3463 G11
3464 H9
3465 G11
3466 H9
3467 G11
3468 H11
3469 G11
3470 H11
3471 H11
3472 H11
3473 H11
3474 H11
3475 H11
3476 G11
3477 G11
3478 G11
3479 G11
3480 H11
3481 H11
3482 H5
3483 G9
3487 E11
3488 G9
3489 G3
3490 H9
3491 G7
3492 E11
3499 G3
3500-1 G1
3500-2 G1
3500-3 G1
3500-4 G1
3501-1 G1
3501-2 G1
3501-3 G1
3501-4 G1
3508-1 G1
3508-2 G1
3508-3 G1
3508-4 G1
3509-1 H1
3509-2 H1
3509-3 H1
3509-4 G1
3515 G9
3519 G3
3521-1 D11
3521-2 D11
3521-3 D11
3521-4 D11
3524 G11
3527 G9
3528 H9
3529 H9
3530 G3
3532 G3
3533 G7
3534 E13
3535 G3
3539-1 D13
3539-2 E13
3539-3 E13
3539-4 E13
3544 H7
3545 H5
3546 G5
3547 G5
3548 G5
3549 H5
3550 G7
3551 H7
3552 H7
3553 H7
3554 H7
3555 H7
3556 H5
3557 H7
3558 H5
3559 H7
3560 H5
3561 H5
3562 G5
3563 G5
3564 G5
3565 G5
3566 G5
3567 G5
3568 G5
3569 G5
3570 G5
3571 G5
3572 G7
3573 G5
3595 G7
3596 G7
3597 G7
3598 G7
3599 G7
3600 G7
3601 G7
3602 G7
3603 G7
3612 H7
3670 G9
3671 D11
3672 G7
3673 H7
3674 H5
3675 H5
3676 H5
3738-1 D11
3738-2 D11
3738-3 D11
3738-4 D11
3864 H9
3865 E13
3873 G9
3899 B10
3912 G9
5034 B2
5035 C2
5039 B2
5069 H1
5070 G9
5183 B1
5184 C1
6007 A11
6013 B10
7003 B11
7011-1 B12
7011-2 F10
7011-3 C12
7011-4 F2
7011-5 F6
7011-6 A7
F301 B2
F302 C2
F303 B14
F304 C14
F305 C14
F306 C14
F307 B13
F308 C13
F309 C13
F310 C13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FUNCTION CODE
D25
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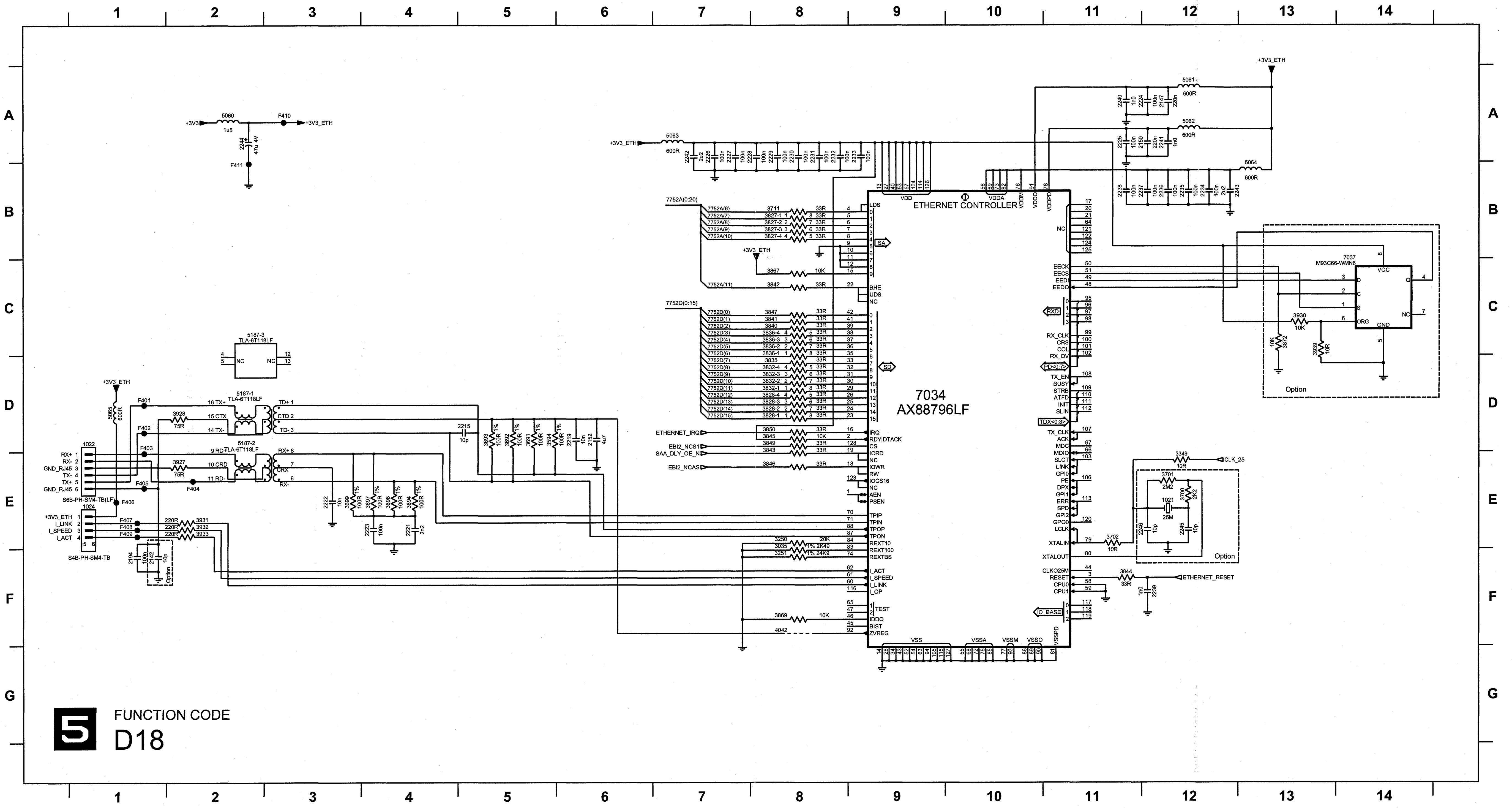
11
12
13
14
A
B
C
D
E
F
G
H
+1V5
+3V3
+1V5_PLL
+1V5_EPLD
+3V3_EPLD
5183
5184
F301
F302
5034
5035
5039
600R
30R
1u5
7011-6
EP1C6Q240C8
POWER
BANK1
BANK2
BANK3
BANK4
VCCIO
VCCINT
VCCA
GND
GNDA
GNDG
PLL1
PLL2
Debugging
+3V3
3138
220R
6007
TLMH3100
3139
100K
7003
2N7002
7011-1
CONTROL
JTAG
TMS
TDO
TDI
TCK
STATUS
MSEL
DCLK
CE
CEO
CLK
CONF_DONE
CONFIG
DATA0
EBI0_SDCLKOUT
EPLD_CONFDONE
EBI2_SDCLKOUT
CLK_20
EPLD_RESET_N
EPLD_nCONFIG
EPLD_DATA0
EPLD_nCONFIG
EPLD_nSTATUS
EPLD_DATA0
EPLD_DCLK
Option
BAS316
6013
3899
7011-3
BANK 2
DEV_OE
DEV_CLR
7011-4
BANK 3
CLK_25
3347
75R
5069
BLM18B
7011-5
BANK4
7011-2
BANK 1
CLKUSR
INIT_DONE
CLK_6
3348
10R
5070
600R
ATAD(0:15)
EBI0_NCAS
EBI0_NCS1
EBI0_NCS2
7750_INTRQ
IIS_WCLK
SFSY
PWM
EPLD_RESET_N
ATA_DA2
ATA_CS3FX_N
ATA_CS1FX_N
ATA_DA0
ATA_DA1
ATA_INTRQ
ATA_IORDY
ATA_IORD_N
ATA_IOWR_N
PCCARDD(2)
SPI_EXT_INT-PCI_A18
SPI_MISO-PCI_A19
PCCARD_WAIT#
2443_MCI_CLK-PCI_CS
SPI_SS_N-PCI_A23
2443_MCI_CMD-PCI_A21
2443_MCI_DAT0-PCI_A20
2443_MCI_DAT1-PCI_A22
PCCARD_CE1#
PCCARD_IOWR#
PCCARD_CE2#
PCCARD_OE#
PCCARD_IORD#
PCCARD_WE#
EBI2_NOE
EBI2_NCS1
EBI2_NCS2
EBI2_NRAS
7752_INTRQ
PCCARD_INTRQ#
SAA_DLY_OE_N
EBI0_NOE
EBI0_NCS0
EBI2_NCAS
EBI0_NRAS

CIRCUIT DIAGRAM - Part 5

1021 E12
1022 D1
1024 E1
2142 F1
2147 A12
2150 A12
2152 D6
2194 F1
2215 D5
2219 D6
2221 E4
2222 E3
2223 E4
2224 A12
2225 A11
2226 A7
2227 A7
2228 A8
2229 A8
2230 A8
2231 A8
2232 A8
2233 A9
2234 B12
2235 B12
2236 B12
2237 B12
2238 B11
2239 F12
2240 A11
2241 A12
2242 A7
2243 B12
2244 A2
2245 E12
2246 E12
3035 E8
3250 E8
3251 F8
3349 E12
3594 D5
3691 D5
3692 D5
3693 D5
3694 E4
3696 E4
3697 E4
3699 E3
3700 E12
3701 E12
3702 E11
3711 B8
3827-1 B8
3827-2 B8
3827-3 B8
3827-4 B8
3828-1 D8
3828-2 D8
3828-3 D8
3828-4 D8
3832-1 D8
3832-2 D8
3832-3 D8
3832-4 D8
3835 D8
3836-1 D8
3836-2 C8
3836-3 C8
3836-4 C8
3840 C8
3841 C8
3842 C8
3843 E8
3844 F11
3845 D8
3846 E8
3847 C8
3849 D8
3850 D8
3867 C8
3869 F8
3872 C13
3927 E2
3928 D2
3930 C13
3931 E2
3932 E2
3933 E2
3939 C13
4042 F8
5060 A2
5061 A12
5062 A12
5063 A7
5064 B13
5065 D1
5187-1 D2
5187-2 D2
5187-3 C2
7034 D10
7037 C14
F401 D1
F402 D1
F403 D1
F404 E2
F405 E1
F406 E1
F407 E1
F408 E1
F409 E1
F410 A3
F411 B2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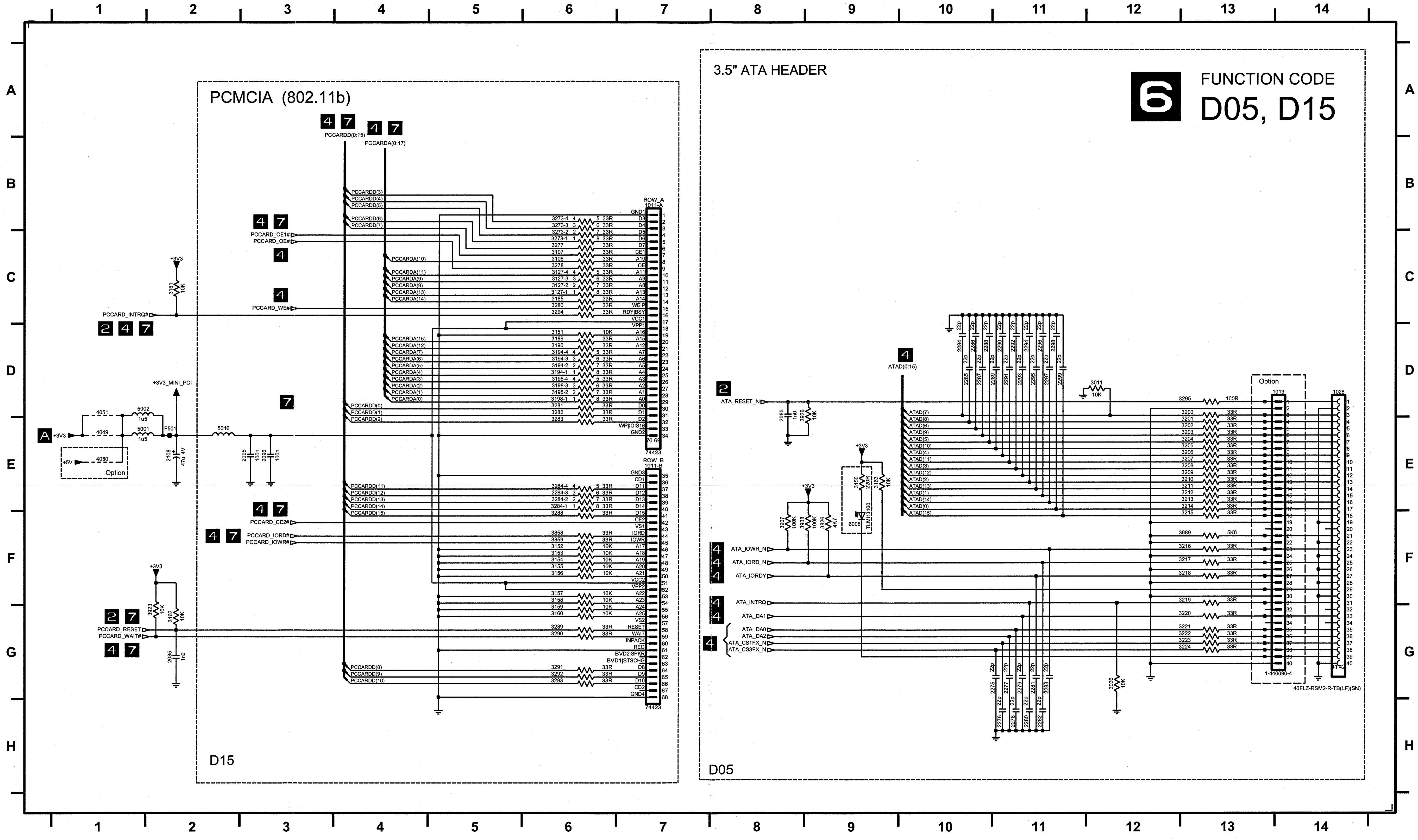
11
12
13
14
A
B
C
D
E
F
G
+3V3
5060
1u5
F410
+3V3_ETH
2244
47u 4V
F411
+3V3_ETH
5063
600R
5061
600R
5062
600R
5064
600R
7752A(0:20)
7752D(0:15)
3711
3867
10K
3842
33R
ETHERNET_IRQ
EBI2_NCS1
SAA_DLY_OE_N
EBI2_NCAS
SA
SD
VDD
VDDA
ETHERNET CONTROLLER
VDDM
VDDO
VDDPD
7034
AX88796LF
EECK
EECS
EEDI
EEDO
RXD
RX_CLK
CRS
COL
RX_DV
PD<0:7>
TX_EN
BUSY
STRB
ATFD
INIT
SLIN
TDX<0:3>
TX_CLK
ACK
MDC
MDIO
SLCT
LINK
GPI0
PE
DPX
GPI1
ERR
SPD
GPI2
GPO0
LCLK
XTALIN
XTALOUT
CLKO25M
RESET
CPU0
CPU1
IO BASE
VSS
VSSA
VSSM
VSSO
VSSPD
LDS
BHE
UDS
NC
IRQ
RDY/DTACK
CS
IORD
IOWR
RW
IOCS16
AEN
PSEN
TPIP
TPIN
TPOP
TPON
REXT10
REXT100
REXTBS
I_ACT
I_SPEED
I_LINK
I_OP
TEST
IDDQ
BIST
ZVREG
3250 20K
3035 1% 2K49
3251 1% 24K9
3869 10K
4042
7037
M93C66-WMN6
VCC
D
C
S
ORG
Q
NC
GND
3930 10K
3872 10K
3939 10K
Option
3349 10R
CLK_25
3701 2M2
1021 25M
3700 2K2
3702 10R
3844 33R
ETHERNET_RESET
1022
RX+
RX-
GND_RJ45
TX-
TX+
GND_RJ45
S6B-PH-SM4-TB(LF)
1024
+3V3_ETH
I_LINK
I_SPEED
I_ACT
S4B-PH-SM4-TB
5065 600R
F401
F402
F403
F404
F405
F406
F407
F408
F409
3928 75R
3927 75R
3931 220R
3932 220R
3933 220R
5187-1 TLA-6T118LF
5187-2 TLA-6T118LF
5187-3 TLA-6T118LF
TX+
CTX
TX-
RD-
CRD
RD-
TD+
CTD
TD-
RX+
CRX
RX-
2215 10p
3693 100R 1%
3692 100R 1%
3691 100R 1%
3594 100R 1%
2219 10n
2152 4u7
2222 10n
3699 100R 1%
3697 100R 1%
3696 100R 1%
3694 100R 1%
2223 100n
2221 2n2
2194 100n
2142 10p
Option

5 FUNCTION CODE D18

CIRCUIT DIAGRAM - Part 6

1011-A	B7
1011-B	E7
1013	D14
1028	D14
2085	G2
2086	D8
2095	E3
2096	E3
2108	E2
2275	G11
2276	H11
2277	G11
2278	H11
2279	G11
2280	H11
2281	G11
2282	H11
2283	G11
2284	D10
2285	D10
2286	D10
2287	D10
2288	D10
2289	D11
2290	D11
2291	D11
2292	D11
2293	D11
2294	D11
2295	D11
2296	D11
2297	D11
2298	D11
2299	D11
3011	D12
3036	G12
3107	C6
3108	C6
3127-1	C6
3127-2	C6
3127-3	C6
3127-4	C6
3150	E9
3151	D6
3152	F6
3153	F6
3154	F6
3155	F6
3156	F6
3157	F6
3158	F6
3159	G6
3160	G6
3161	C2
3162	G2
3163	E9
3185	C6
3189	D6
3190	D6
3194-1	D6
3194-2	D6
3194-3	D6
3194-4	D6
3198-1	D6
3198-2	D6
3198-3	D6
3198-4	D6
3200	D13
3201	E13
3202	E13
3203	E13
3204	E13
3205	E13
3206	E13
3207	E13
3208	E13
3209	E13
3210	E13
3211	E13
3212	E13
3213	E13
3214	E13
3215	F13
3216	F13
3217	F13
3218	F13
3219	F13
3220	G13
3221	G13
3222	G13
3223	G13
3224	G13
3273-1	C6
3273-2	C6
3273-3	B6
3273-4	B6
3277	C6
3278	C6
3280	C6
3281	D6
3282	D6
3283	E6
3284-1	E6
3284-2	E6
3284-3	E6
3284-4	E6
3288	F6
3289	G6
3290	G6
3291	G6
3292	G6
3293	G6
3294	C6
3295	D13
3689	F13
3826	F9
3858	F6
3859	F6
3907	F8
3908	F8
3923	G2
3926	D8
4049	E1
4050	E1
4051	D1
5001	E1
5002	D1
5016	E2
6008	F9
F501	E2


1
2
3
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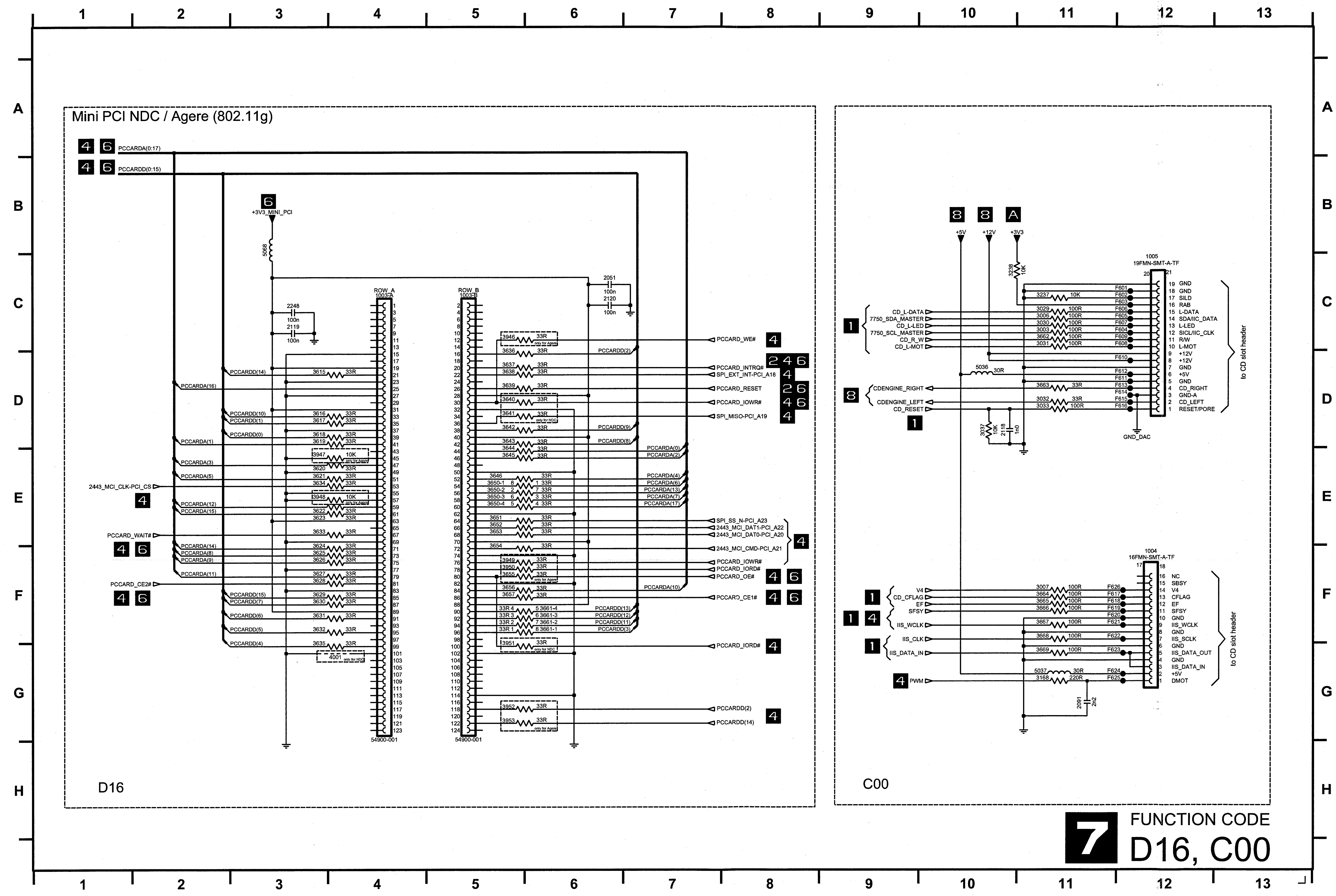
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
PCMCIA (802.11b)
3.5" ATA HEADER
6
FUNCTION CODE
D05, D15
PCCARDD(0:15)
PCCARDA(0:17)
PCCARD_CE1#
PCCARD_OE#
PCCARD_WE#
PCCARD_INTRQ#
PCCARD_CE2#
PCCARD_IORD#
PCCARD_IOWR#
PCCARD_RESET
PCCARD_WAIT#
+3V3
+3V3_MINI_PCI
+5V
Option
ROW_A
1011-A
ROW_B
1011-B
74423
D15
D05
ATA_RESET_N
ATAD(0:15)
ATA_IOWR_N
ATA_IORD_N
ATA_IORDY
ATA_INTRQ
ATA_DA1
ATA_DA0
ATA_DA2
ATA_CS1FX_N
ATA_CS3FX_N
1013
1028
1-440090-4
40FLZ-RSM2-R-TB(LF)(SN)
TLMS1000
6008

CIRCUIT DIAGRAM - Part 7


Mini PCI NDC / Agere (802.11g)
PCCARDA(0:17)
PCCARDD(0:15)
+3V3_MINI_PCI
5068
2248 100n
2119 100n
2051 100n
2120 100n
ROW_A 1003-A
ROW_B 1003-B
54900-001
2443_MCI_CLK-PCI_CS
PCCARD_WAIT#
PCCARD_CE2#
PCCARD_WE#
PCCARD_INTRQ#
SPI_EXT_INT-PCI_A18
PCCARD_RESET
PCCARD_IOWR#
SPI_MISO-PCI_A19
SPI_SS_N-PCI_A23
2443_MCI_DAT1-PCI_A22
2443_MCI_DAT0-PCI_A20
2443_MCI_CMD-PCI_A21
PCCARD_IORD#
PCCARD_OE#
PCCARD_CE1#
PCCARDD(2)
PCCARDD(14)
D16
+5V
+12V
+3V3
3238 10K
1005
19FMN-SMT-A-TF
19 GND
18 GND
17 SILD
16 RAB
15 L-DATA
14 SDA/IIC_DATA
13 L-LED
12 SICL/IIC_CLK
11 R/W
10 L-MOT
9 +12V
8 +12V
7 GND
6 +5V
5 GND
4 CD_RIGHT
3 GND-A
2 CD_LEFT
1 RESET/PORE
to CD slot header
CD_L-DATA
7750_SDA_MASTER
CD_L-LED
7750_SCL_MASTER
CD_R_W
CD_L-MOT
CDENGINE_RIGHT
CDENGINE_LEFT
CD_RESET
5036 30R
3037 10K
2118 1n0
GND_DAC
1004
16FMN-SMT-A-TF
16 NC
15 SBSY
14 V4
13 CFLAG
12 EF
11 SFSY
10 GND
9 IIS_WCLK
8 GND
7 IIS_SCLK
6 GND
5 IIS_DATA_OUT
4 GND
3 IIS_DATA_IN
2 +5V
1 DMOT
V4
CD_CFLAG
EF
SFSY
IIS_WCLK
IIS_CLK
IIS_DATA_IN
PWM
5037 30R
3168 220R
2091 2n2
C00
7
FUNCTION CODE
D16, C00

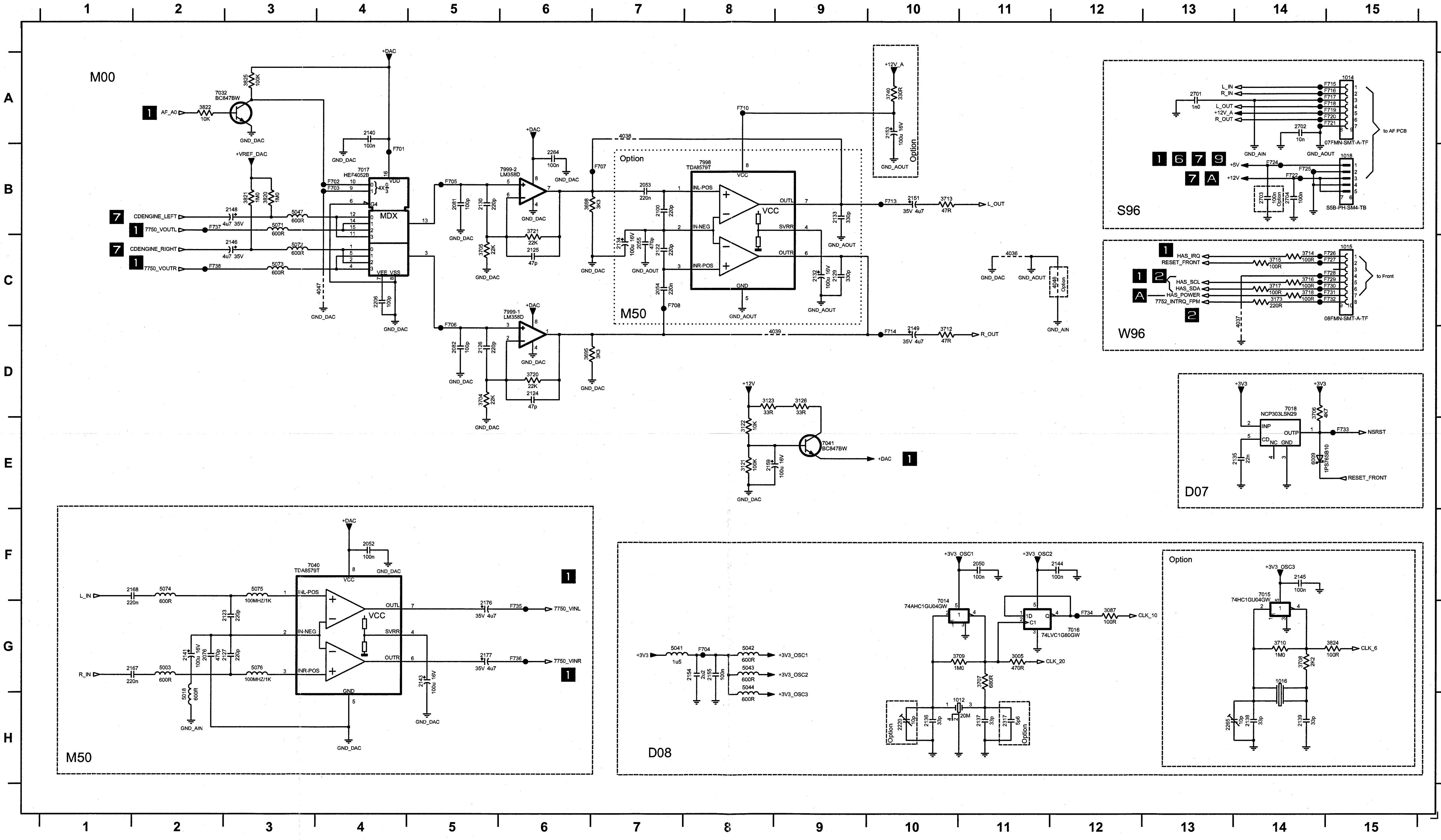
1003-A	C4
1003-B	C5
1004	F12
1005	C12
2051	C6
2091	G11
2118	D10
2119	C3
2120	C6
2248	C3
3003	C11
3006	C11
3007	F11
3029	C11
3030	C11
3031	C11
3032	D11
3033	D11
3037	D10
3168	G11
3237	C11
3238	C10
3615	D3
3616	D3
3617	D3
3618	D3
3619	D3
3620	E3
3621	E3
3622	E3
3623	E3
3624	F3
3625	F3
3626	F3
3627	F3
3628	F3
3629	F3
3630	F3
3631	F3
3632	F3
3633	E3
3634	E3
3635	G3
3636	D5
3637	D5
3638	D5
3639	D5
3640	D5
3641	D5
3642	D5
3643	D5
3644	E5
3645	E5
3646	E5
3650-1	E5
3650-2	E5
3650-3	E5
3650-4	E5
3651	E5
3652	E5
3653	E5
3654	F5
3655	F5
3656	F5
3657	F5
3661-1	F6
3661-2	F6
3661-3	F6
3661-4	F6
3662	C11
3663	D11
3664	F11
3665	F11
3666	F11
3667	F11
3668	F11
3669	G11
3946	C5
3947	E3
3948	E3
3949	F5
3950	F5
3951	G5
3952	G5
3953	G5
4001	G4
5036	D10
5037	G11
5068	B3
F601	C12
F602	C12
F603	C12
F604	C12
F605	C12
F606	C12
F607	C12
F608	C12
F609	C12
F610	D12
F611	D12
F612	D12
F613	D12
F614	D12
F615	D12
F616	D12
F617	F11
F618	F11
F619	F11
F620	F11
F621	F11
F622	F11
F623	G11
F624	G11
F625	G11
F626	F11

CIRCUIT DIAGRAM - Part 8

8 FUNCTION CODE

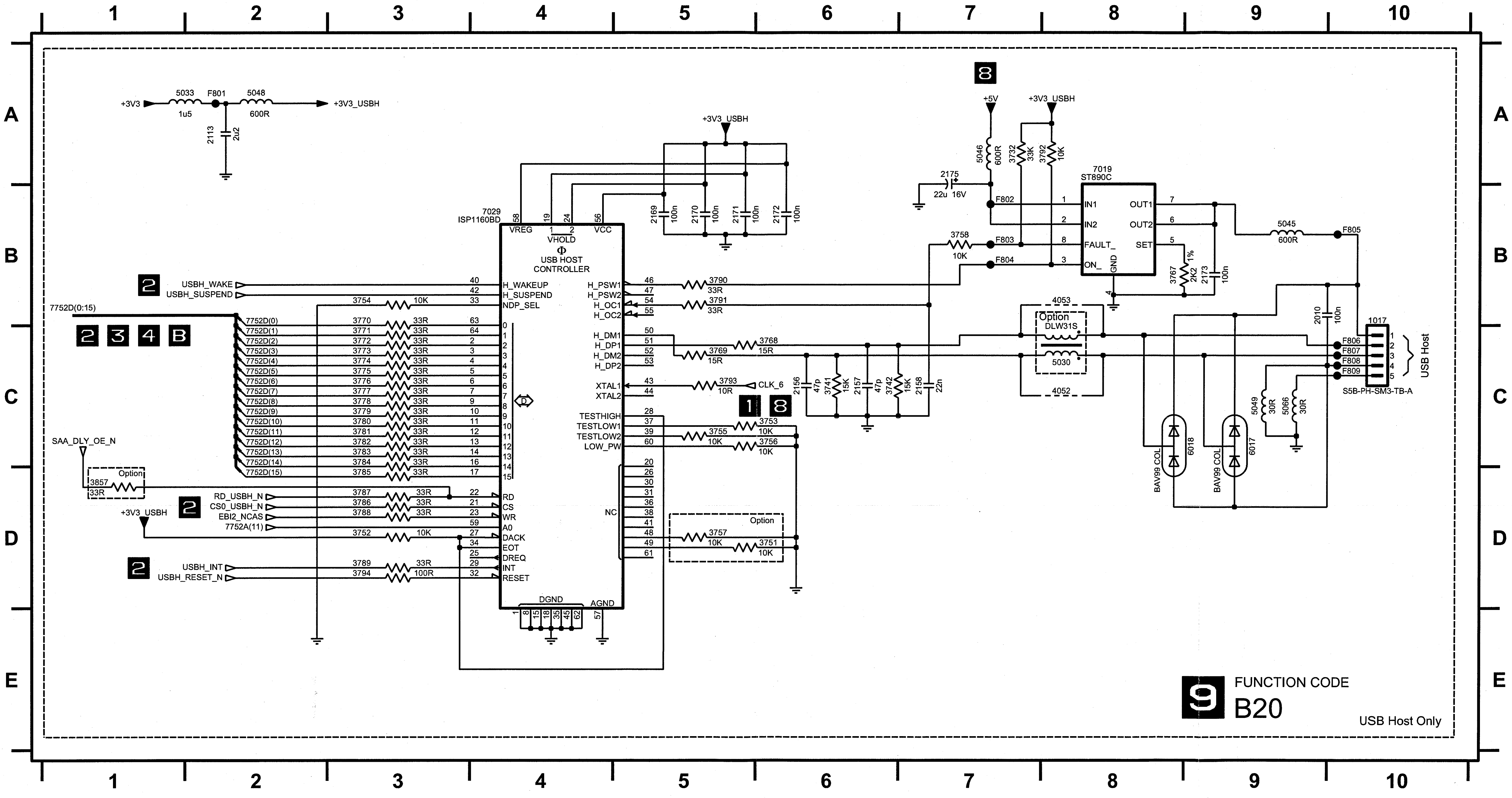
M00, M50, D07, D08, S96, W96

1012 H11
1014 A15
1015 C15
1016 G14
1018 B15
2050 F11
2052 F4
2053 B7
2054 C7
2055 C7
2076 G3
2081 B5
2082 D5
2100 B7
2122 C7
2123 G3
2124 D6
2125 C6
2126 D5
2127 G3
2129 C9
2130 B5
2132 C9
2133 B9
2134 C7
2135 E14
2136 H10
2137 H11
2138 H14
2139 H14
2140 A4
2141 G2
2143 G5
2144 F12
2145 F14
2146 C3
2148 B3
2149 D10
2151 B10
2153 A10
2154 G8
2155 G8
2159 E8
2167 G2
2168 F2
2176 G5
2177 G5
2206 C4
2220 H10
2264 B6
2265 H13
2317 H11
3005 G11
3087 G12
3121 E8
3122 E8
3123 D8
3126 D9
3173 C14
3695 D6
3698 B6
3704 D5
3705 C5
3706 D14
3707 G11
3708 G14
3709 G11
3710 G14
3712 D10
3713 B10
3714 C14
3715 C14
3716 C14
3717 C14
3718 C14
3720 D6
3721 B6
3740 A10
3820 B3
3821 B3
3822 A2
3824 G15
3825 A3
4036 C11
4037 C14
4038 A7
4039 D9
4046 C12
4047 C4
5003 G2
5018 H2
5041 G7
5042 G8
5043 G8
5044 G8
5047 B3
5071 B3
5072 C3
5073 C3
5074 F2
6009 E14
7014 G10
7015 F14
7016 G12
7017 B4
7018 D14
7032 A2
7040 F4
7041 E9
7998 B8
7999-1 C6
7999-2 B6
F701 B4
F702 B4
F703 B4
F704 G8
F705 B5
F706 D5
F707 B7
F708 C7
F710 A8
F713 B10
F714 D10
F715 A15
F716 A15
F717 A15
F718 A15
F719 A15
F720 A15
F721 A15
F722 B14
F724 B14
F725 B14
F726 C15
F727 C15
F728 C15
F729 C15
F730 C15
F731 C15
F732 C15
F733 E15
F734 G12
F735 G6
F736 G6
F737 B2
F738 C2


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H
M00
AF_A0
3822 10K
7032 BC847BW
3825 100K
GND_DAC
+VREF_DAC
3821 1M0
3820 1M0
CDENGINE_LEFT
2148 4u7 35V
5047 600R
7750_VOUTL
F737
5071 600R
CDENGINE_RIGHT
2146 4u7 35V
5072 600R
7750_VOUTR
F738
5073 600R
4047
+DAC
2140 100n
F701
F702
F703
7017 HEF4052B
VDD
4X
G4
MDX
VEE VSS
2206 100p
F705
F706
2081 100p
2130 220p
2082 100p
2126 220p
3705 22K
3704 22K
7999-2 LM358D
7999-1 LM358D
2264 100n
3721 22K
2125 47p
3720 22K
2124 47p
F707
3698 3K3
3695 3K3
4038
Option
7998 TDA8579T
INL-POS
IN-NEG
INR-POS
OUTL
SVRR
OUTR
VCC
GND
2053 220n
2100 220p
2134 100u 16V
2055 470p
2122 220p
2054 220n
2132 100u 16V
2129 330p
2133 330p
F708
GND_AOUT
M50
4039
F710
+12V_A
3740 330R
2153 100u 16V
Option
F713
2151 35V 4u7
3713 47R
L_OUT
F714
2149 35V 4u7
3712 47R
R_OUT
4036
GND_AIN
4046 Option
+12V
3123 33R
3126 33R
3122 10K
3121 100K
2159 100u 16V
7041 BC847BW
+DAC
1
S96
L_IN
R_IN
2701 1n0
L_OUT
+12V_A
R_OUT
F715 F716 F717 F718 F719 F720 F721
1014
2702 10n
07FMN-SMT-A-TF
to AF PCB
1 6 7 9
7 A
+5V
+12V
F724 F725 F722
1018
2703 100n Option
2704 100n
S5B-PH-SM4-TB
W96
HAS_IRQ
RESET_FRONT
HAS_SCL
HAS_SDA
HAS_POWER
7752_INTRQ_FPM
3714 100R
3715 100R
3716 100R
3717 100R
3718 100R
3173 220R
F726 F727 F728 F729 F730 F731 F732
1015
08FMN-SMT-A-TF
to Front
4037
D07
+3V3
7018 NCP303LSN29
INP
CD
NC
GND
OUTP
2135 22n
3706 4K7
F733
NSRST
6009 1PS76SB10
RESET_FRONT
M50
L_IN
R_IN
2168 220n
5074 600R
2167 220n
5003 600R
5018 600R
GND_AIN
5075 100MHZ/1K
5076 100MHZ/1K
2141 100u 16V
2076 470p
2123 220p
2127 220p
7040 TDA8579T
2052 100n
2176 35V 4u7
2177 35V 4u7
2143 100u 16V
F735
7750_VINL
F736
7750_VINR
D08
+3V3
5041 1u5
F704
2154 2u2
2155 100n
5042 600R
5043 600R
5044 600R
+3V3_OSC1
+3V3_OSC2
+3V3_OSC3
2050 100n
2144 100n
7014 74AHC1GU04GW
7016 74LVC1G80GW
1D
C1
F734
3087 100R
CLK_10
3709 1M0
3005 470R
CLK_20
3707 680R
1012 20M
2220 10p Option
2136 33p
2137 33p
2317 5p6 Option
Option
2145 100n
7015 74HC1GU04GW
3710 1M0
3708 2K2
3824 100R
CLK_6
1016
2265 10p
2138 33p
2139 33p

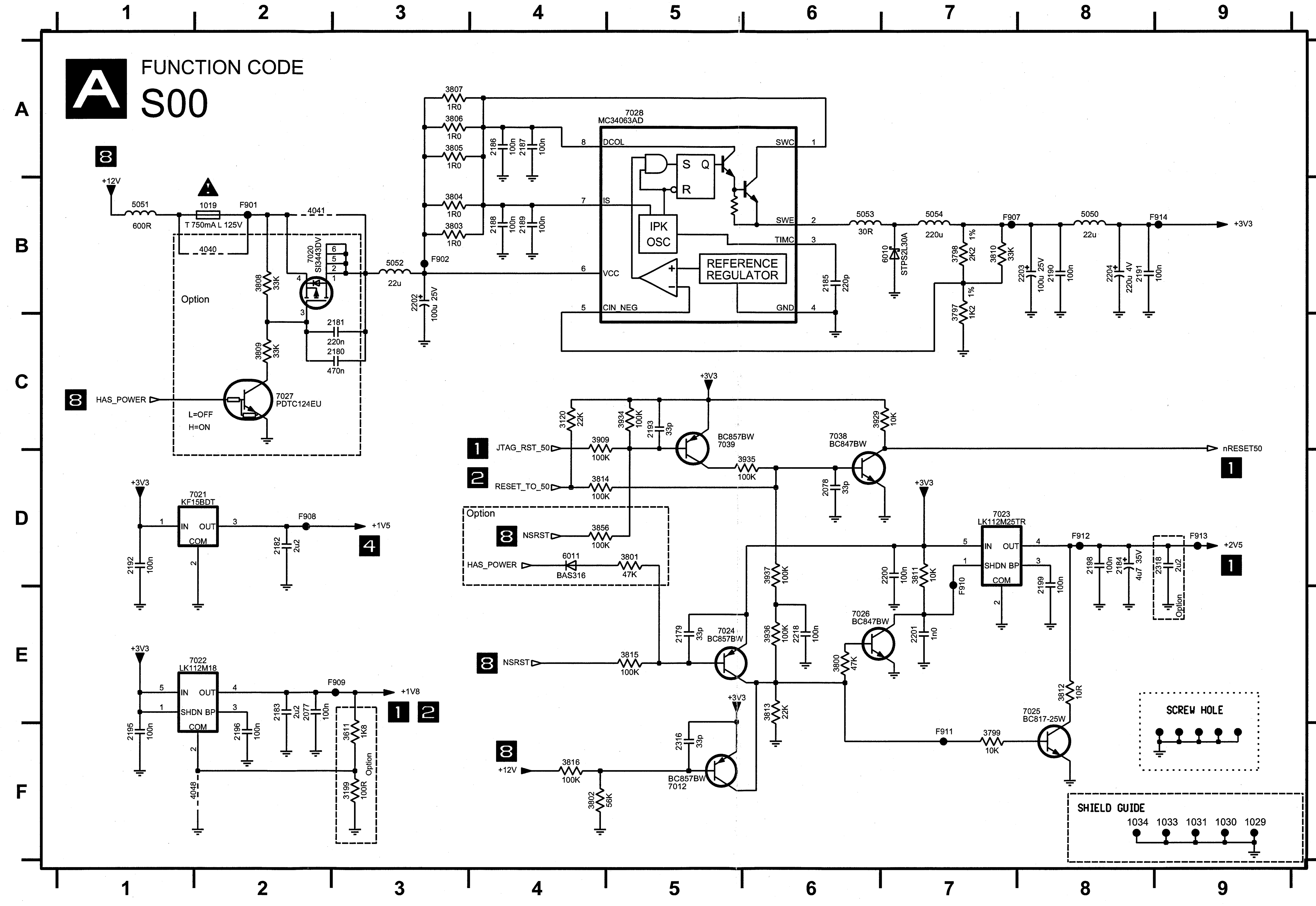
CIRCUIT DIAGRAM - Part 9

1017 B10
2010 B9
2113 A2
2156 C6
2157 C6
2158 C7
2169 B5
2170 B5
2171 B5
2172 B6
2173 B9
2175 A7
3732 A7
3741 C6
3742 C6
3751 D6
3752 D3
3753 C6
3754 B3
3755 C5
3756 C6
3757 D5
3758 B7
3767 B8
3768 C6
3769 C5
3770 B3
3771 C3
3772 C3
3773 C3
3774 C3
3775 C3
3776 C3
3777 C3
3778 C3
3779 C3
3780 C3
3781 C3
3782 C3
3783 C3
3784 C3
3785 D3
3786 D3
3787 D3
3788 D3
3789 D3
3790 B5
3791 B5
3792 A8
3793 C5
3794 D3
3857 D1
4052 C8
4053 B8
5030 C8
5033 A1
5045 B9
5046 A7
5048 A2
5049 C9
5066 C9
6017 C9
6018 C9
7019 A8
7029 B4
F801 A2
F802 B7
F803 B7
F804 B7
F805 B10
F806 C10
F807 C10
F808 C10
F809 C10



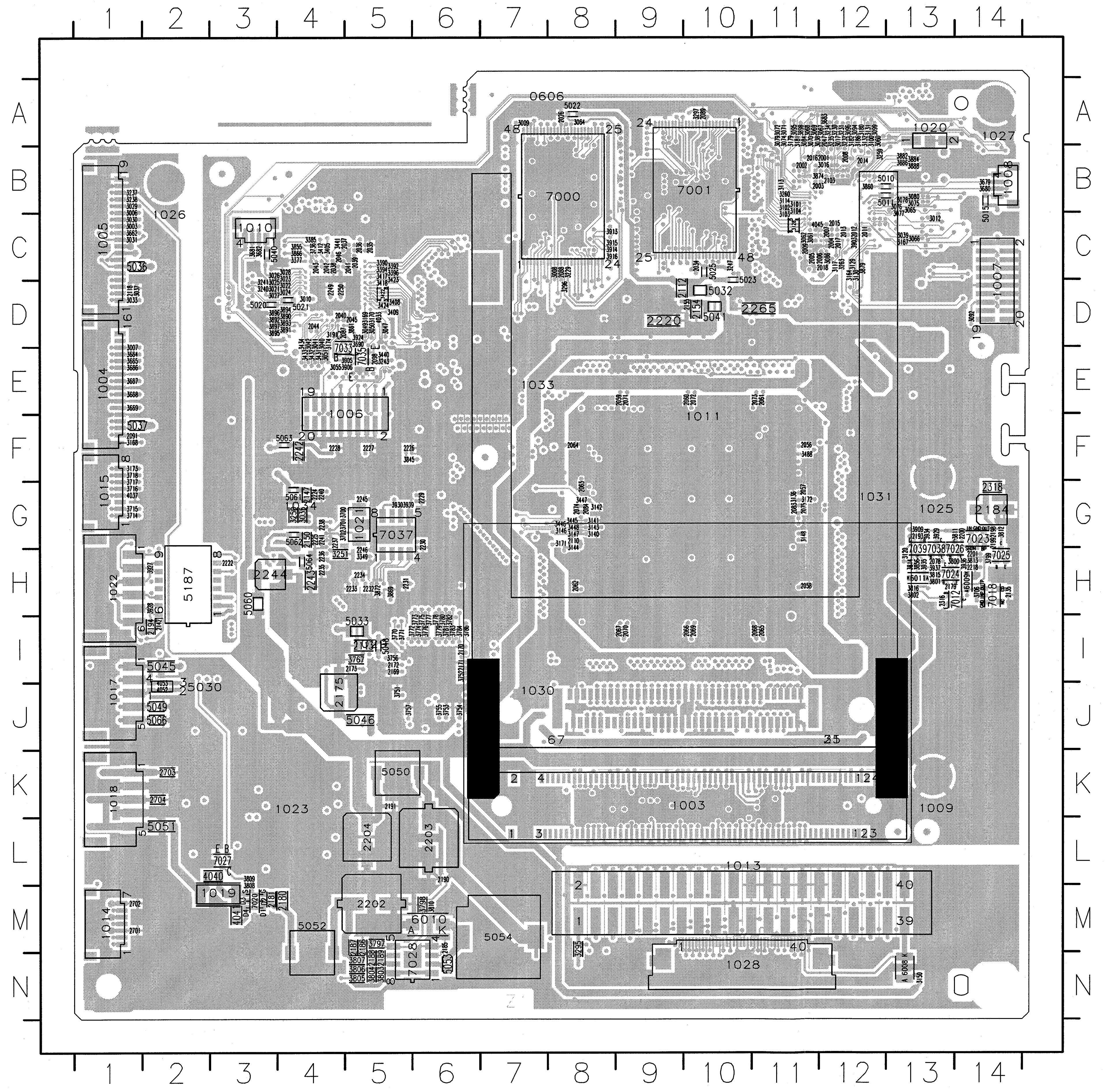
1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
+3V3
5033
1u5
F801
5048
600R
+3V3_USBH
2113
2u2
+3V3_USBH
7029
ISP1160BD
VREG
VHOLD
VCC
USB HOST
CONTROLLER
2169
100n
2170
100n
2171
100n
2172
100n
USBH_WAKE
USBH_SUSPEND
H_WAKEUP
H_SUSPEND
NDP_SEL
3754
10K
7752D(0:15)
7752D(0)
7752D(1)
7752D(2)
7752D(3)
7752D(4)
7752D(5)
7752D(6)
7752D(7)
7752D(8)
7752D(9)
7752D(10)
7752D(11)
7752D(12)
7752D(13)
7752D(14)
7752D(15)
3770
3771
3772
3773
3774
3775
3776
3777
3778
3779
3780
3781
3782
3783
3784
3785
33R
SAA_DLY_OE_N
Option
3857
33R
RD_USBH_N
CS0_USBH_N
EBI2_NCAS
7752A(11)
3787
3786
3788
3752
10K
+3V3_USBH
USBH_INT
USBH_RESET_N
3789
33R
3794
100R
RD
CS
WR
A0
DACK
EOT
DREQ
INT
RESET
DGND
AGND
H_PSW1
H_PSW2
H_OC1
H_OC2
3790
33R
3791
33R
H_DM1
H_DP1
H_DM2
H_DP2
3768
15R
3769
15R
XTAL1
XTAL2
3793
10R
CLK_6
TESTHIGH
TESTLOW1
TESTLOW2
LOW_PW
3753
10K
3755
10K
3756
10K
NC
Option
3757
10K
3751
10K
2156
47p
3741
15K
2157
47p
3742
15K
2158
22n
+5V
+3V3_USBH
5046
600R
3732
33K
3792
10K
2175
22u 16V
F802
F803
F804
3758
10K
7019
ST890C
IN1
IN2
FAULT_
ON_
GND
OUT1
OUT2
SET
3767
2K2
1%
2173
100n
5045
600R
F805
4053
Option
DLW31S
5030
4052
2010
100n
1017
F806
F807
F808
F809
USB Host
S5B-PH-SM3-TB-A
5049
30R
5066
30R
BAV99 COL
6018
BAV99 COL
6017
FUNCTION CODE
B20
USB Host Only

CIRCUIT DIAGRAM - Part 10


1 2 3 4 5 6 7 8 9
A B C D E F
A
FUNCTION CODE
S00
+12V
5051
600R
1019
T 750mA L 125V
F901
4041
4040
Option
7020
SI3443DV
3808
33K
3809
33K
2181
220n
2180
470n
7027
PDTC124EU
HAS_POWER
L=OFF
H=ON
5052
22u
F902
2202
100u 25V
3807 1R0
3806 1R0
3805 1R0
3804 1R0
3803 1R0
2186 100n
2187 100n
2188 100n
2189 100n
7028
MC34063AD
DCOL
IS
VCC
CIN_NEG
SWC
SWE
TIMC
GND
IPK OSC
REFERENCE REGULATOR
S Q R
2185
220p
5053
30R
6010
STPS2L30A
5054
220u
3798 2K2 1%
3797 1K2 1%
F907
3810 33K
2203 100u 25V
2190 100n
5050
22u
2204 220u 4V
2191 100n
F914
+3V3
3120 22K
3934 100K
2193 33p
BC857BW 7039
3929 10K
7038 BC847BW
JTAG_RST_50
3909 100K
3935 100K
nRESET50
RESET_TO_50
3814 100K
2078 33p
NSRST
3856 100K
6011 BAS316
3801 47K
7021 KF15BDT
IN OUT COM
F908
2182 2u2
2192 100n
+1V5
7023 LK112M25TR
IN OUT SHDN BP COM
F912
2198 100n
2184 4u7 35V
2318 2u2
F913
+2V5
3937 100K
2200 100n
3811 10K
F910
2199 100n
3936 100K
2218 100n
2179 33p
7024 BC857BW
7026 BC847BW
2201 1n0
3800 47K
3815 100K
3813 22K
3812 10R
7025 BC817-25W
F911
3799 10K
7022 LK112M18
F909
+1V8
2183 2u2
2077 100n
2195 100n
2196 100n
3611 1K8
3199 100R
4048
2316 33p
BC857BW 7012
3816 100K
3802 56K
SCREW HOLE
SHIELD GUIDE
1034 1033 1031 1030 1029

1019	B2
2077	E2
2078	D6
2179	E5
2180	C3
2181	C3
2182	D2
2183	E2
2184	D8
2185	B6
2186	A4
2187	A4
2188	B4
2189	B4
2190	B8
2191	B8
2192	D1
2193	C5
2195	F1
2196	F2
2198	D8
2199	D8
2200	D7
2201	E7
2202	B3
2203	B8
2204	B8
2218	E6
2316	F5
2318	D9
3120	C4
3199	F3
3611	F3
3797	B7
3798	B7
3799	F7
3800	E6
3801	D5
3802	F4
3803	B3
3804	B3
3805	A3
3806	A3
3807	A3
3808	B2
3809	C2
3810	B7
3811	D7
3812	E8
3813	E6
3814	D4
3815	E5
3816	F4
3856	D4
3909	C4
3929	C6
3934	C5
3935	D6
3936	E6
3937	D6
4040	B2
4041	B2
4048	F2
5050	B8
5051	B1
5052	B3
5053	B6
5054	B7
6010	B7
6011	D4
6012	E5
7012	F5
7020	B2
7021	D2
7022	E2
7023	D7
7024	E5
7025	E8
7026	E6
7027	C2
7028	A5
7038	C6
7039	C5
F901	B2
F902	B3
F907	B7
F908	D2
F909	E3
F910	D7
F911	F7
F912	D8
F913	D9
F914	B9

LAYOUT DIAGRAM (side A)



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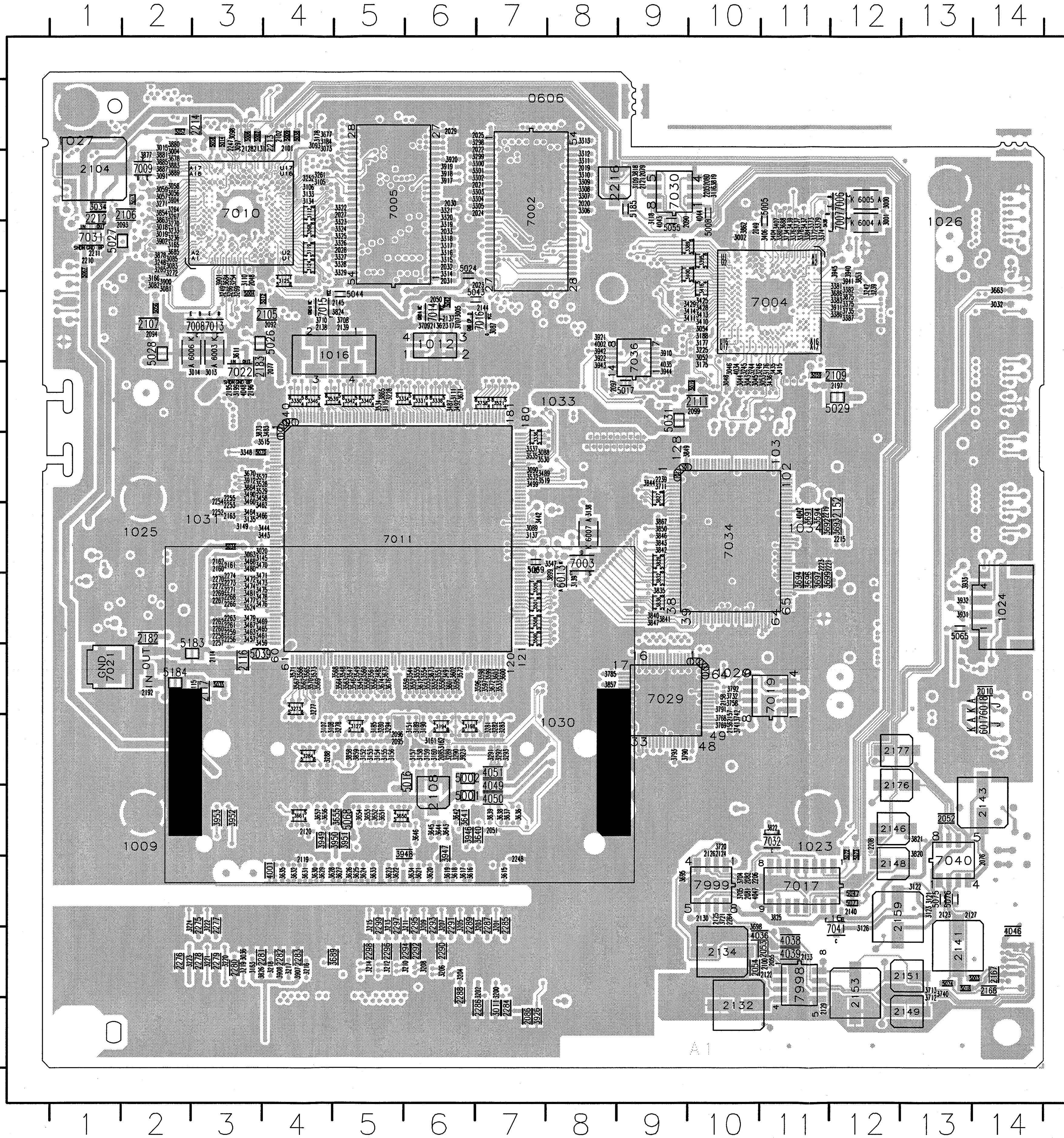
1004	E1	2186	M5	3079	A11	3667	E1	3930	G5
1005	C1	2187	M5	3080	B13	3668	E1	3934	G13
1006	E5	2188	N5	3084	A11	3669	E1	3935	H13
1007	D14	2189	N5	3086	C12	3679	B14	3936	H14
1008	B14	2190	L6	3092	D14	3680	B14	3937	H13
1010	C3	2191	K5	3094	A12	3681	C3	3939	G5
1011	F10	2193	G13	3095	A11	3682	C3	4033	D5
1013	L10	2194	I2	3096	A12	3683	A12	4037	G1
1014	M1	2198	G14	3099	A12	3690	D5	4040	L3
1015	G1	2199	G14	3100	A12	3700	G4	4041	M3
1017	J1	2200	G14	3101	B11	3701	G4	4045	C11
1018	K1	2201	H14	3102	B11	3702	G4	4052	J2
1019	M3	2202	M5	3103	C11	3706	H14	4053	I2
1020	A13	2203	L6	3104	B11	3714	G1	5010	B12
1021	G5	2204	L5	3113	B11	3715	G1	5011	B12
1022	H1	2218	H14	3114	B11	3716	G1	5015	C14
1028	N10	2220	D9	3117	C12	3717	G1	5020	D3
2001	B12	2222	H3	3120	H13	3718	F1	5021	D4
2002	B11	2224	G4	3128	C11	3736	C4	5022	A8
2003	B11	2225	G4	3129	C12	3751	J5	5023	D10
2004	C12	2226	F5	3130	C12	3752	I6	5025	C10
2005	C11	2227	F5	3131	A12	3753	J6	5030	J2
2006	C12	2228	F4	3132	A12	3754	J6	5032	D10
2007	C12	2229	G6	3136	G11	3755	J6	5033	I5
2008	B12	2230	G6	3140	G8	3756	I5	5036	C1
2009	C11	2231	H5	3141	G8	3757	J5	5037	F1
2011	C12	2232	H5	3142	G8	3767	I5	5040	C3
2012	C12	2233	H5	3143	G8	3770	I5	5041	D10
2013	C12	2234	H5	3144	G8	3771	I5	5045	I2
2014	B12	2235	H4	3146	G8	3772	I5	5046	J5
2015	C12	2236	H4	3147	G8	3773	I6	5048	I5
2016	B11	2237	G4	3148	G11	3774	I6	5049	J2
2017	C12	2238	G4	3150	N13	3775	I6	5050	K5
2018	C12	2240	G4	3164	C12	3776	I6	5051	L2
2026	A8	2241	G4	3167	C13	3777	I6	5052	M4
2034	C10	2242	F4	3168	F1	3778	I6	5053	N6
2035	C5	2243	H4	3169	D5	3779	I6	5054	M7
2036	C5	2244	H3	3170	D5	3780	I6	5060	H3
2037	C4	2245	G5	3171	G8	3781	I6	5061	G4
2038	C4	2246	H5	3172	G11	3782	I6	5062	G4
2039	C5	2249	D4	3173	F1	3783	I6	5063	F4
2040	D4	2250	D4	3174	D4	3784	I6	5064	H4
2041	C5	2265	D11	3179	A11	3786	I6	5066	J2
2042	C4	2316	H13	3180	A12	3794	J6	5187	H2
2043	C4	2318	G14	3181	A11	3797	M5	6008	N13
2044	D4	2701	M1	3182	A12	3798	M6	6009	H14
2045	D5	2702	M1	3186	A12	3799	H14	6010	M6
2046	C4	2703	K2	3191	D4	3800	H13	6011	H13
2047	A12	2704	K2	3229	C8	3801	H13	7000	B8
2056	F11	3003	C1	3230	A12	3802	H13	7001	B10
2057	G11	3006	B1	3231	A12	3803	N5	7012	H14
2058	H11	3007	D1	3232	A12	3804	N5	7018	H14
2059	E9	3008	C8	3234	A12	3805	N5	7020	M3
2060	E10	3009	A7	3235	A12	3806	N5	7023	G14
2061	E11	3010	D4	3237	B1	3807	N5	7024	H13
2062	H8	3012	C13	3238	B1	3808	M3	7025	H14
2063	G8	3016	B12	3240	D3	3809	L3	7026	H14
2064	F8	3017	A12	3241	D3	3810	M6	7027	L3
2065	I11	3021	D3	3243	E5	3811	G14	7028	N5
2066	I10	3022	D4	3247	C10	3812	G14	7033	E4
2067	I9	3023	C4	3250	G4	3813	H14	7035	E5
2068	I11	3024	D4	3251	H4	3814	H13	7037	G5
2069	I10	3025	D3	3259	B12	3815	H13	7038	H13
2070	I9	3026	C3	3260	B11	3816	H13	7039	H13
2071	E9	3027	D3	3263	C12	3845	F5		
2072	E10	3028	C4	3295	M8	3855	C4		
2073	E11	3029	B1	3296	D8	3856	H13		
2074	G8	3030	C1	3297	A10	3860	B12		
2075	G11	3031	C1	3349	H5	3861	D5		
2078	H13	3033	D1	3377	C4	3866	C4		
2083	G11	3035	G4	3385	C4	3869	H5		
2084	G8	3037	D1	3390	C5	3872	H5		
2087	D4	3038	A11	3392	C5	3874	B11		
2088	C8	3039	C13	3394	C5	3879	C12		
2089	A10	3040	D4	3396	C5	3882	B13		
2091	F1	3041	D4	3405	C4	3884	B13		
2098	E5	3042	D4	3408	D5	3886	B13		
2103	B12	3047	D5	3409	D5	3888	B13		
2110	G8	3049	D5	3412	C4	3890	D4		
2112	D9	3050	D5	3417	C5	3891	D4		
2113	I5	3051	E4	3418	D5	3892	D3		
2118	D1	3055	E4	3422	D5	3893	D4		
2135	H14	3060	A12	3423	C5	3894	D4		
2142	I2	3061	C11	3424	D5	3895	D3		
2147	G4	3062	C11	3431	E4	3896	D3		
2150	G4	3064	A8	3432	E4	3897	D3		
2154	D10	3065	B13	3433	E4	3898	A11		
2155	D10	3066	C13	3434	D4	3903	C12		
2169	I5	3067	A12	3440	E5	3905	E5		
2170	I6	3068	A11	3441	C4	3906	E5		
2171	I6	3069	A11	3445	G8	3909	G13		
2172	I5	3070	A11	3446	G8	3913	C8		
2173	I5	3071	A11	3447	G8	3914	C8		
2175	J4	3072	A11	3448	G8	3915	C8		
2179	H13	3074	A11	3488	F11	3916	C8		
2180	M4	3075	B13	3662	C1	3924	D5		
2181	M3	3076	B13	3664	E1	3927	H2		

LAYOUT DIAGRAM (side B)



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2020	B8
2021	B7
2022	A7
2023	C7
2024	B7
2025	A7
2027	B5
2028	C5
2029	A6
2030	B6
2031	C6
2032	C6
2033	C6
2048	C3
2049	C10
2050	D6
2051	K7
2052	K13
2053	M11
2054	M10
2055	M11
2076	L14
2077	E4
2079	B9
2080	B10
2081	L10
2082	L10
2085	J6
2086	N7
2090	C9
2092	D4
2093	C2
2094	D2
2095	J5
2096	J5
2097	E8
2099	E10
2100	M11
2101	A4
2102	A4
2104	B1
2105	D4
2106	B2
2107	D2
2108	K6
2109	E12
2111	E10
2114	I3
2115	I3
2116	I3
2117	I3
2119	L4
2120	K4
2121	B9
2122	M11
2123	L13
2124	K10
2125	L10
2126	K10
2127	L13
2128	A3
2129	N11
2130	L10
2131	A3
2132	N10
2133	M11
2134	M10
2136	D6
2137	D6
2138	D4
2139	D5
2140	L12
2141	M13
2143	K14
2144	D7
2145	D5
2146	K12
2148	L12
2149	N13
2151	M13
2152	G12
2153	M12
2156	J10
2157	J10
2158	I10
2159	L12
2160	G3
2161	G3
2162	G3
2163	G3
2167	M14
2168	M14
2176	K12
2177	J12
2182	H2
2183	E3
2192	I2
2195	E3
2196	E3
2197	E12
2205	B10
2206	L10
2208	K12
2210	C1
2211	C1
2212	B1
2213	A4
2214	A3
2215	G12
2216	B8
2219	G11
2221	G11
2223	G11
2239	F9
2247	A3
2248	L7
2252	G3
2253	G3
2254	F3
2255	F3
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2258	H3
2259	H3
2260	H3
2261	H3
2262	H3
2263	H3
2264	L10
2266	H3
2267	H3
2268	H3
2269	H3
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2289	L6
2290	M6
2291	L6
2292	M6
2293	L6
2294	M6
2295	L6
2296	M5
2297	L5
2298	M5
2299	L5
2317	D6
3000	B12
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3018	C2
3019	C2
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3036	M3
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3073	A4
3081	C2
3082	C2
3083	C2
3085	C2
3087	D7
3088	F7
3089	G7
3090	F7
3091	B2
3093	A4
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3166	C2
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3176	E11
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3185	J5
3188	D10
3189	J6
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3203	L7
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3215	L5
3216	M4
3217	M4
3218	M4
3219	M3
3220	M3
3221	M3
3222	L3
3223	M2
3224	L2
3225	D10
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3266	D3
3267	B2
3268	C4
3269	D3
3270	C2
3271	B2
3272	C2
3273	I4
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3278	J5
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3281	J7
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3289	J6
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3291	J7
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3293	J7
3294	J5
3298	A7
3299	B7
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3334	E5
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3338	E6
3340	E5
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3347	G8
3348	F3
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3480	G3
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3482	I5
3483	E4
3487	E6
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3490	F3
3491	I6
3492	E6
3499	F7
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3572	I6
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3596	I7
3597	I7
3598	I7
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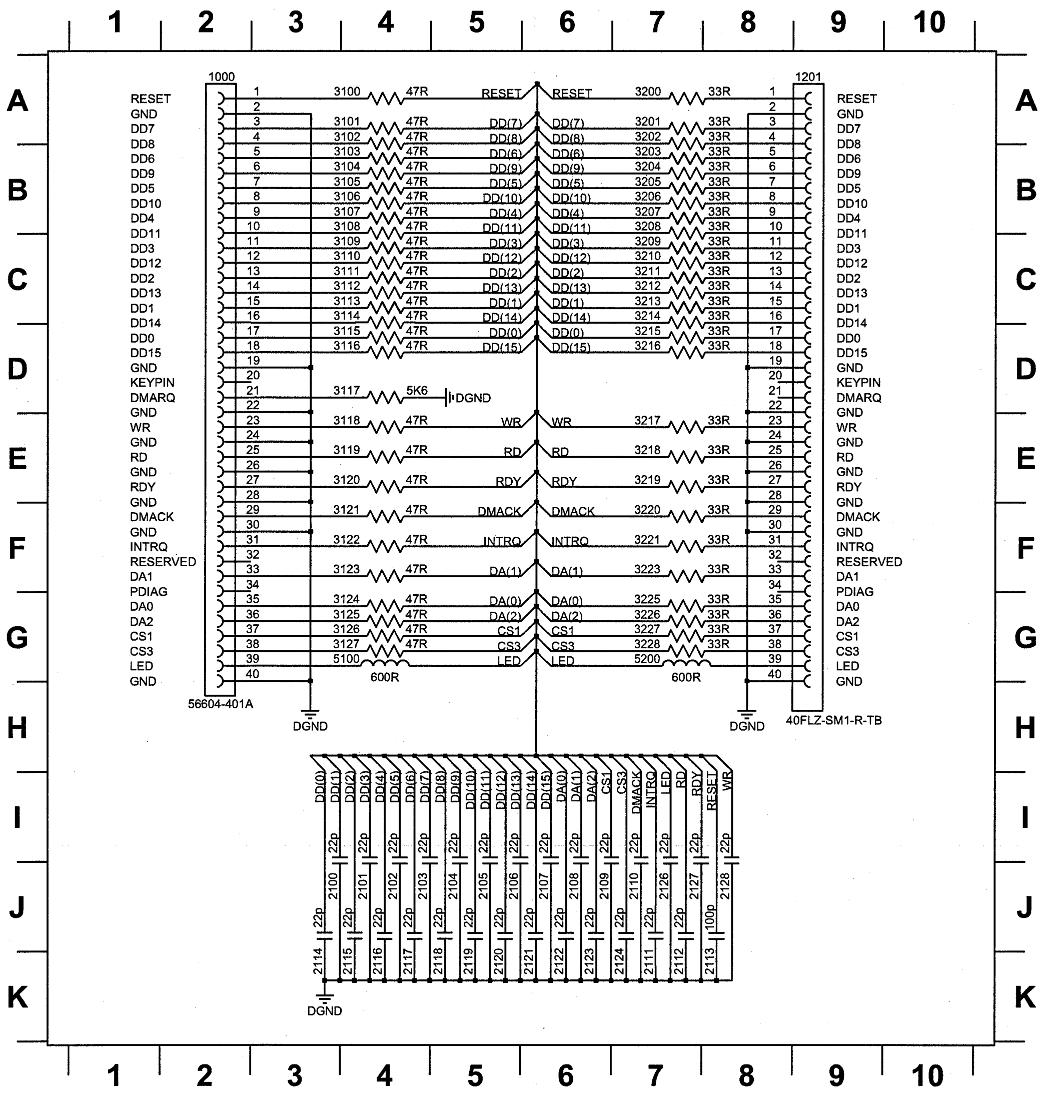
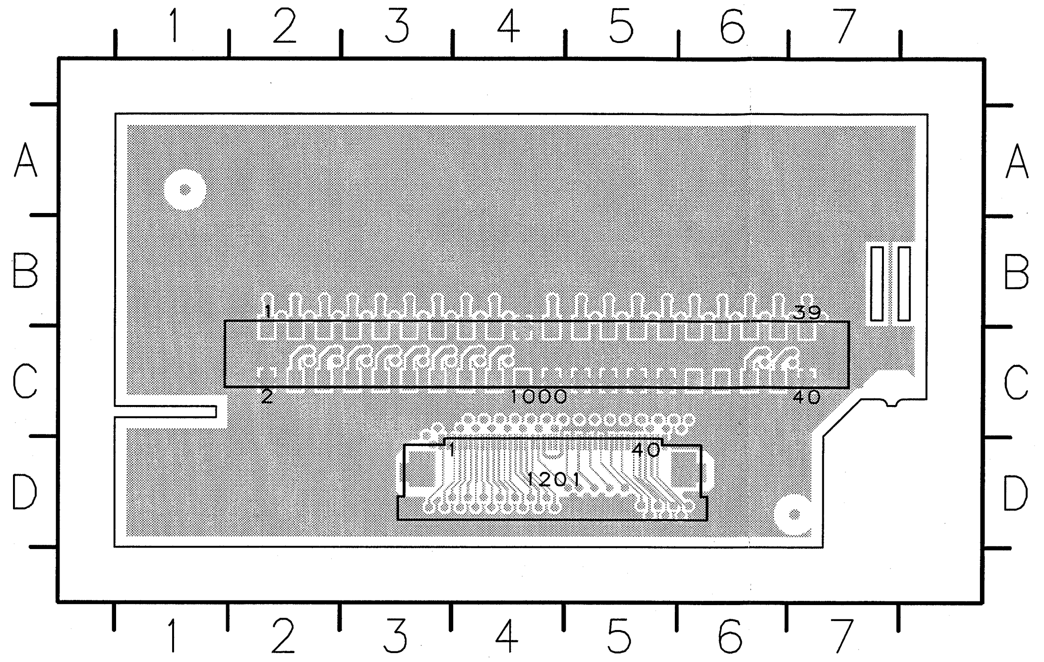
3634	L6
3635	L4
3636	K7
3637	K7
3638	K7
3639	K7
3640	K7
3641	K6
3642	K6
3643	K6
3644	K6
3645	K6
3646	K6
3650	K5
3651	K5
3652	K5
3653	K5
3654	K5
3655	K5
3656	K4
3657	K4
3661	K4
3663	C14
3670	F3
3671	E6
3672	I7
3673	I6
3674	I5
3675	I5
3676	I5
3677	A4
3678	B2
3684	C3
3685	C2
3686	D12
3688	C11
3689	M5
3691	G11
3692	G11
3693	G12
3694	H11
3695	L9
3696	H11
3697	H11
3698	M10
3699	H11
3704	L10
3705	L10
3707	D6
3708	D5
3709	D6
3710	D4
3711	F9
3712	N13
3713	M13
3720	K10
3721	L10
3732	I10
3734	C11
3735	D12
3737	C11
3738	E7
3740	M13
3741	J10
3742	J10
3758	I10
3768	J10
3769	J10
3785	I8
3787	I8
3788	I8
3789	J8
3790	J9
3791	I10
3792	I10
3793	J9
3818	B9
3819	B10
3820	K13
3821	K13
3822	K11
3824	D5
3825	L11
3826	M3
3827	F9
3828	G9
3832	H9
3835	H9
3836	H9
3840	H9
3841	H9
3842	G9
3843	G9
3844	F9
3846	G9
3847	H9
3849	F9
3850	G9
3853	C12
3854	B2
3857	I8
3858	J5
3859	J5
3862	C10
3863	B2
3864	F3
3865	E5
3867	G9
3873	E3
3875	D12
3877	B2
3878	C2
3880	A2
3881	B2
3883	B2
3885	B2
3887	B2
3889	B2
3899	H8
3900	C2
3901	C3
3902	C2
3904	B2
3907	M4
3908	M4
3910	D9
3911	D12
3912	F3
3917	B6
3918	B6
3919	B6
3920	B6
3921	D8
3922	D8
3923	J6
3926	N7
3931	H13
3932	H13
3933	H13
3940	C12
3941	C12
3942	D8
3943	E8
3944	E9
3945	C12
3946	K6
3947	K6
3948	K6
3949	K4
3950	K5
3951	K5
3952	K3
3953	K3
4001	L4
4002	D8
4034	E10
4035	E9
4036	M10
4038	M11
4039	M11
4042	G11
4043	C9
4044	B10
4046	M14
4047	L10
4048	E3
4049	K7
4050	K7
4051	J7
5001	K6
5002	J6
5003	M14
5004	D3
5005	B11
5006	A3
5007	A3
5008	C10
5009	A4
5012	D3
5013	B2
5014	A3
5016	J6
5017	E9
5018	M13
5019	E10
5024	C6
5026	D4
5027	C1
5028	D2
5029	E12
5031	E9
5034	G3
5035	I3
5038	A4
5039	I3
5042	D6
5043	D6
5044	D5
5047	L12
5055	C9
5056	D2
5057	A2
5058	A3
5059	E11
5065	H13
5067	C1
5068	K5
5069	G7
5070	F3
5071	L12
5072	K12
5073	K12
5074	M13
5075	L13
5076	L13
5183	H3
5184	I2
5185	B9
6003	D3
6004	C12
6005	B12
6006	D2
6007	G8
6013	H8
6017	J14
6018	I14
7002	B7
7003	G8
7004	D11
7005	B5
7006	B12
7007	C12
7008	D3
7009	B2
7010	B3
7011	G5
7013	D3
7014	D6
7015	D4
7016	D7
7017	L11
7019	I11
7021	I1
7022	E3
7029	I9
7030	B9
7031	C1
7032	K11
7034	G10
7036	D9
7040	L13
7041	M12
7998	M11
7999	L10

INTERFACE HDD TO FCC BOARD - Circuit Diagram


1000
1201
RESET
GND
DD7
DD8
DD6
DD9
DD5
DD10
DD4
DD11
DD3
DD12
DD2
DD13
DD1
DD14
DD0
DD15
KEYPIN
DMARQ
WR
RD
RDY
DMACK
INTRQ
RESERVED
DA1
PDIAG
DA0
DA2
CS1
CS3
LED
47R
33R
5K6
600R
22p
100p
DGND
56604-401A
40FLZ-SM1-R-TB

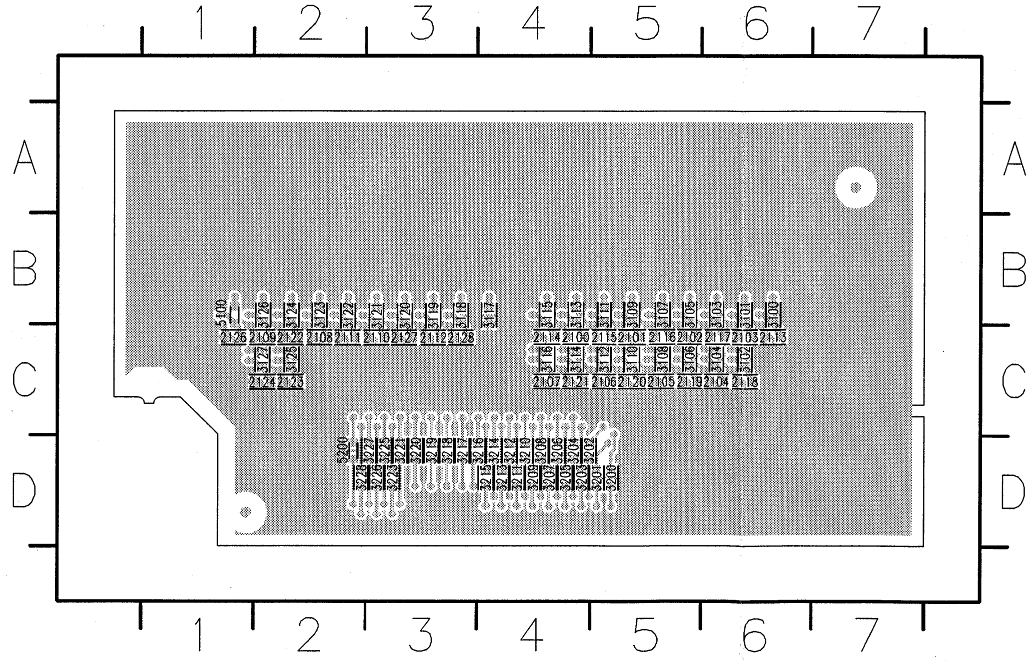
1000	A2	3200	A7
1201	A9	3201	A7
2100	J3	3202	A7
2101	J4	3203	B7
2102	J4	3204	B7
2103	J4	3205	B7
2104	J5	3206	B7
2105	J5	3207	B7
2106	J5	3208	B7
2107	J6	3209	C7
2108	J6	3210	C7
2109	J6	3211	C7
2110	J7	3212	C7
2111	K7	3213	C7
2112	K7	3214	C7
2113	K8	3215	D7
2114	K3	3216	D7
2115	K4	3217	E7
2116	K4	3218	E7
2117	K4	3219	E7
2118	K5	3220	F7
2119	K5	3221	F7
2120	K5	3223	F7
2121	K6	3225	G7
2122	K6	3226	G7
2123	K6	3227	G7
2124	K7	3228	G7
2126	J7	5100	G4
2127	J7	5200	G7
2128	J8		
3100	A4		
3101	A4		
3102	A4		
3103	B4		
3104	B4		
3105	B4		
3106	B4		
3107	B4		
3108	B4		
3109	C4		
3110	C4		
3111	C4		
3112	C4		
3113	C4		
3114	C4		
3115	D4		
3116	D4		
3117	D4		
3118	E4		
3119	E4		
3120	E4		
3121	F4		
3122	F4		
3123	F4		
3124	G4		
3125	G4		
3126	G4		
3127	G4		

INTERFACE HDD TO FCC BOARD - Layout Diagram


1
2
39
40
1000
1
40
1201

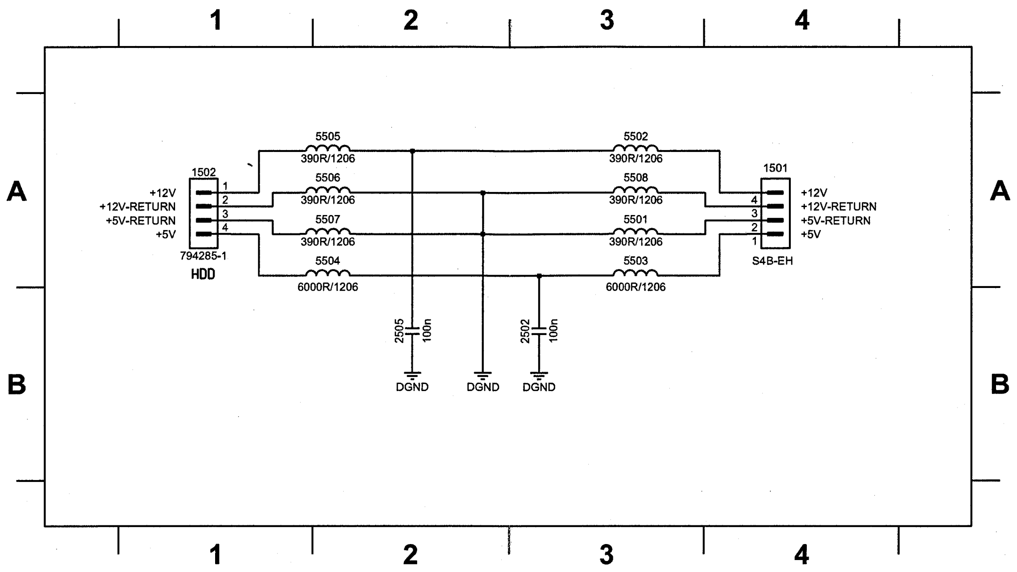
1000	C4
1201	D4

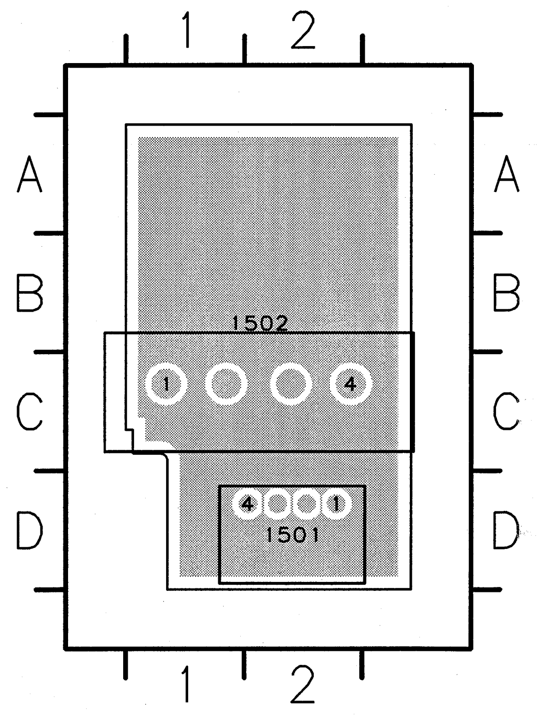
2100	C4	2110	C3	2120	C5	3102	C6	3112	C5	3122	B2	3204	D4	3214	D4	3226	D3
2101	C5	2111	C2	2121	C4	3103	B6	3113	B4	3123	B2	3205	D4	3215	D4	3227	D3
2102	C5	2112	C3	2122	C2	3104	C6	3114	C4	3124	B2	3206	D4	3216	D4	3228	D2
2103	C6	2113	C6	2123	C2	3105	B5	3115	B4	3125	C2	3207	D4	3217	D3	5100	B1
2104	C6	2114	C4	2124	C2	3106	C5	3116	C4	3126	B2	3208	D4	3218	D3	5200	D2
2105	C5	2115	C5	2126	C1	3107	B5	3117	B4	3127	C2	3209	D4	3219	D3		
2106	C5	2116	C5	2127	C3	3108	C5	3118	B3	3200	D5	3210	D4	3220	D3		
2107	C4	2117	C6	2128	C3	3109	B5	3119	B3	3201	D5	3211	D4	3221	D3		
2108	C2	2118	C6	3100	B6	3110	C5	3120	B3	3202	D4	3212	D4	3223	D3		
2109	C2	2119	C5	3101	B6	3111	B5	3121	B3	3203	D4	3213	D4	3225	D3		

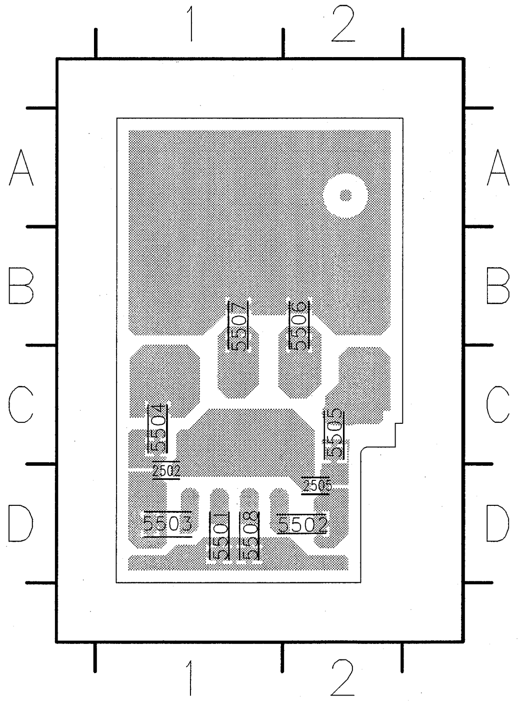


INTERFACE HDD SUPPLY BOARD

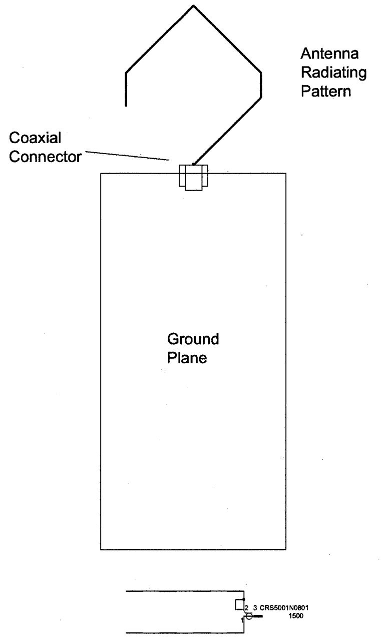
1501 A4	1502 A1	2502 B3	2505 B2	5501 A3	5502 A3	5503 A3	5504 A2	5505 A2	5506 A2	5507 A2	5508 A3

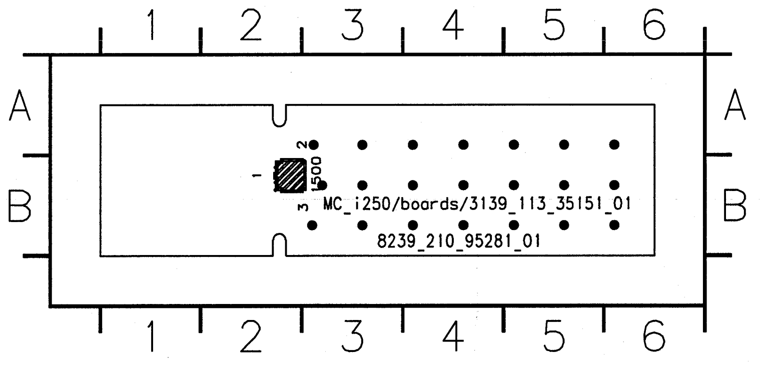

1
2
3
4
A
B
5505
390R/1206
5506
390R/1206
5507
390R/1206
5504
6000R/1206
5502
390R/1206
5508
390R/1206
5501
390R/1206
5503
6000R/1206
1502
+12V
+12V-RETURN
+5V-RETURN
+5V
794285-1
HDD
1501
+12V
+12V-RETURN
+5V-RETURN
+5V
S4B-EH
2505
100n
2502
100n
DGND
DGND
DGND

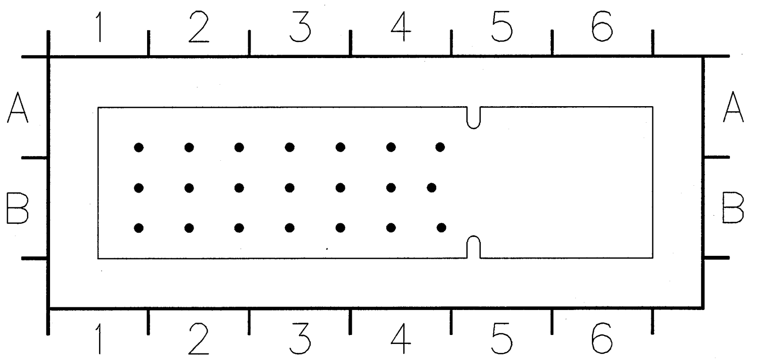

1
2
A
B
C
D
1502
1
4
1501
4
1


1
2
A
B
C
D
5507
5506
5504
5505
2502
2505
5503
5501
5508
5502

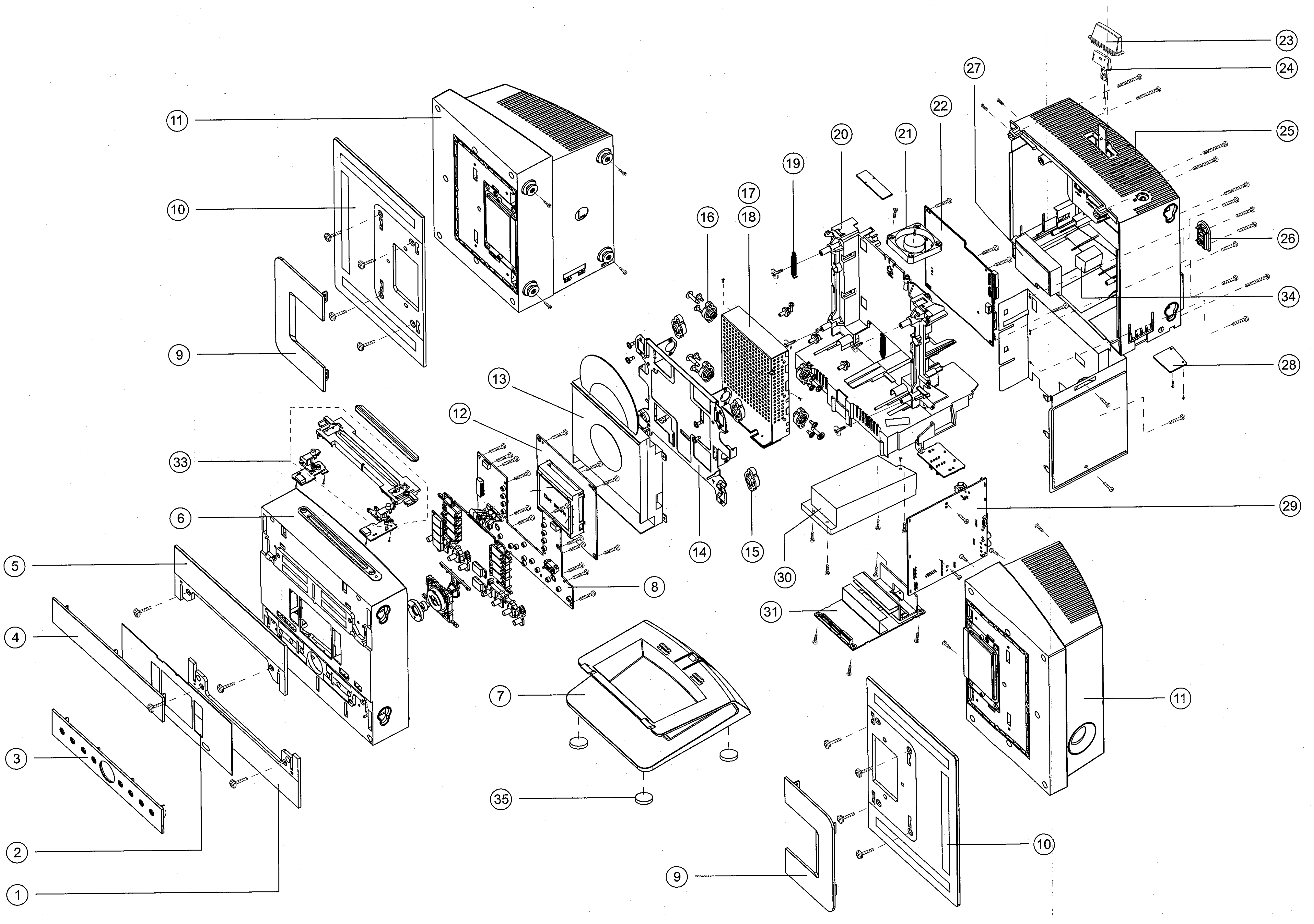
ANTENNA BOARD


Antenna
Radiating
Pattern
Coaxial
Connector
Ground
Plane
2
3 CRS5001N0801
1
1500


1
2
3
4
5
6
A
B
1500
1
2
3
MC_i250/boards/3139_113_35151_01
8239_210_95281_01



EXPLODED VIEW DIAGRAM


(23)
(24)
(27)
(22)
(25)
(20)
(21)
(11)
(19)
(17)
(18)
(16)
(10)
(26)
(34)
(9)
(28)
(13)
(12)
(33)
(29)
(6)
(14)
(15)
(30)
(5)
(8)
(31)
(4)
(7)
(11)
(3)
(35)
(10)
(2)
(9)
(1)

ACCESSORIES

3141 078 70071	CD ROM INSTALL SW
2422 076 00687	ANT FM DIP
2422 076 00569	CABLE LAN 1M5 LAN RJ45 B
3139 228 64431	TINO REMOTE RM20001/01
3139 238 08551	REMOTE RC1463401/01
3141 070 40321	SCREW WALL FIX WAS700
3141 071 20321	WALL MOUNT BKT WAC700
3141 073 20221	BTM SHEET WAC700

MECHANICAL PARTS LIST

1	3141 074 00972	COVER FNT CEN BTM
2	3141 074 00964	PANEL CEN BTM
3	3141 074 00982	PANEL DISPLAY
4	3141 077 50491	PANEL CEN PRE-ASSY
5	3141 074 01582	COVER FNT CEN UPPER
6	3141 077 50221	CAB FRONT PRE-ASSY (/22, /05)
6	3141 077 50621	CAB FRONT PRE-ASSY (/37)
7	3141 077 50461	STAND CEN PRE-ASSY
8	#	PBAS 6 - KEYS & RC HAS
9	3141 074 01224	PANEL LSB
10	3141 074 01214	COVER LSB
11	3141 077 50501	LSB BOX PRE-ASSY
12	#	PBAS 4 - FRONT HAS
13	3103 308 54641	SLOT LOADER MODULE + MP3
14	3141 071 20161	BRACKET CD/HDD
15	3141 074 01181	DAMPER CD DRIVER
16	3141 074 01171	DAMPER HDD DRIVER
17	3122 785 90621	HDRM SW2.5.2
18	3141 071 20263	SHIELD BOX
19	3141 071 00051	SPRING CD/HDD
20	3141 074 01164	BRACKET CORE
21	2822 031 00029	FAN 12VDC
22	3103 308 68101	PBAS - HASLI (11G)
23	3141 074 01693	COVER ANTENNA WJ10/22
24	3141 074 01703	BRACKET ANTENNA WJ10/22
25	3141 074 01197	CABINET REAR (/22, /05)
25	3141 074 01524	CABINET REAR (/37)
26	3141 074 01372	COVER MAINS CORD
27	#	TUNER MODULE
28	3141 073 20161	CUT SHEET LSB CABLE
28	3141 074 02261	RUBBER CAB. REAR
29	#	PBAS 5 - AF HAS
30	#	MODULE SMPS - WAC-700
31	#	MODULE AMP - HAS 4CH (40W)
32	3141 077 50421	BTN PWR/REC PRE-ASSY
35	3141 074 01402	RUBBER FOOT
36	3141 074 01041	LIGHTGUIDE LED
37	3141 074 00692	BRACKET RECEIVER
38	3141 074 00682	BRACKET LED

refer Electrical Parts List

ELECTRICAL PARTSLIST

GENERAL

1002	3141 078 00181	MODULE TUNER - PM08 /EU
1002	3141 078 00201	MODULE TUNER - PM08 /US
1003	⚠ 3141 078 00211	MODULE SMPS - WAC700 (/22, /05)
1003	⚠ 3141 078 00451	MODULE SMPS - WAC700 (/37)
1007	3141 078 70031	LCD MODULE WAC-700
1008	2822 031 00029	FAN 12VDC 1.08W 3300RPM
1010	3139 118 56981	PCBAS ANTENNA
1011	4822 526 10539	CORE, FERRITE
1013	4822 526 10539	CORE, FERRITE
1014	2422 076 00717	ANT WIFI 2450MHZ 50R
1050	3141 078 00541	PBAS 7 - INTERFACE HDD TO FFC
1051	3141 078 00561	PBAS 9 - INTERFACE HDD-SUPPLY

WIRING

8000	3141 070 20201	FFC FOIL 11P/340/11P AD
8001	3141 070 20211	FFC FOIL 16P/400/16P AD
8002	3139 110 35420	FFC FOIL 15P/340/15P AD
8003	3141 070 20541	FFC FOIL 05P/100/05P BD 1.25MM
8004	3141 070 20541	FFC FOIL 05P/100/05P BD 1.25MM
8005	4822 320 12246	FFC FOIL 13P/220/13P AD
8011	3141 070 20591	FFC FOIL 07P/120/07P BD 1.00MM
8012	3139 110 35340	FFC FOIL 08P/340/08P AD 1MMP
8013	3141 070 20241	FFC FOIL 16P/280/16P AD 1 MMP
8014	3141 070 20531	FFC FOIL 19P/260/19P AD 1.00MM
8018	⚠ 2422 070 98137	MAINSCORD 220V EUR2M2 (/22)
8018	⚠ 2422 070 00104	MAINSCORD UK 5A 1M8 (/05)
8018	⚠ 2422 070 00084	MAINSCORD UL 7A 2M2 (/37)
8019	3139 111 02611	CBLE CRC 1P/280/1P CRC F-MF
8021	3141 070 20611	FFC FOIL 40P/080/40P AD 0.50

PBAS 6 - KEYS & RC

MISCELLANEOUS

1001	4822 276 13775	SWITCH TACT
1002	4822 276 13775	SWITCH TACT
1003	4822 276 13775	SWITCH TACT
1004	4822 276 13775	SWITCH TACT
1005	4822 276 13775	SWITCH TACT
1006	4822 276 13775	SWITCH TACT
1007	4822 276 13775	SWITCH TACT
1008	4822 276 13775	SWITCH TACT
1009	4822 276 13775	SWITCH TACT
1010	4822 276 13775	SWITCH TACT
1011	4822 276 13775	SWITCH TACT
1012	4822 276 13775	SWITCH TACT
1013	4822 276 13775	SWITCH TACT
1014	4822 276 13775	SWITCH TACT
1015	4822 276 13775	SWITCH TACT
1016	4822 276 13775	SWITCH TACT
1017	4822 276 13775	SWITCH TACT
1018	4822 276 13775	SWITCH TACT
1019	4822 276 13775	SWITCH TACT
1020	4822 276 13775	SWITCH TACT
1021	4822 276 13775	SWITCH TACT
1023	9322 185 95667	IR RECEIVER TSOP4836
1024	9322 210 74667	IR RECEIVER TSOP7000

INDUCTORS

5000	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5001	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5002	4822 157 71206	BLM21A601SPT

DIODES

6000	9322 207 83676	LED IR TSFF5400
6001	9322 207 83676	LED IR TSFF5400
6002	9322 207 83676	LED IR TSFF5400
6003	9322 207 83676	LED IR TSFF5400

TRANSISTORS & IC

7000	5322 130 60159	BC846B
7002	5322 130 60159	BC846B
7004	4822 130 42804	BC817-25
7005	4822 130 42804	BC817-25
7006	5322 130 60159	BC846B
7007	5322 130 60159	BC846B
7008	5322 130 60159	BC846B
7009	5322 130 60159	BC846B
7010	9352 499 60118	IC SM 74LVC00AD
7011	4822 130 60373	BC856B
7012	4822 130 60373	BC856B
7013	4822 130 60373	BC856B
7015	4822 130 60373	BC856B
7016	4822 130 60373	BC856B

ELECTRICAL PARTSLIST

PBAS 4 - FRONT

MISCELLANEOUS

1002	4822 242 11033	RES XTL 4MHZ332
1007	4822 242 70938	RES XTL 32KHZ768
1008	2422 540 98526	RES CER 10MHZ CSTS*MG03
1225	4822 276 13775	SWITCH TACT
1347	4822 276 13775	SWITCH TACT

INDUCTORS

5001	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5004	2422 549 44393	IND FXD SM EMI 100MHZ 2K7
5005	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5006	2422 549 44393	IND FXD SM EMI 100MHZ 2K7
5024	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5025	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5026	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5027	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5028	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5029	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5030	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5031	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5033	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5034	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5035	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5036	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5037	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5038	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5039	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5040	2422 549 44393	IND FXD SM EMI 100MHZ 2K7
5041	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5042	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5043	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5044	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5045	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5046	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5047	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5049	2422 549 44393	IND FXD SM EMI 100MHZ 2K7
5050	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5051	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5052	2422 549 43062	IND FXD SM EMI 100MHZ 600R

DIODES

6207	932214706676	LED VS LTL-1BEHJ
6301	932203320682	LED VS TLHG4405

TRANSISTORS & IC

7001	4822 209 31981	IC SAA6579T
7001	9352 686 05518	IC SAA6581T/V1
7006	3141 070 50111	PRG. FLASH M29W160ET
7007	5322 130 60159	BC846B
7008	4822 209 15449	IC 74HC4094D
7009	3141 070 50101	MCU M30626MWP-211FP
7011	9322 178 88685	IC NCP301LSN27
7012	9322 214 44668	IC M24C08-WMN6P
7012	9322 217 06668	IC AT24C08AN-10SJ-2.7
7012	9322 226 90668	IC AT24C08AN-10SU-2.7
7013	5322 130 60159	BC846B
7014	5322 130 60159	BC846B
7016	9322 208 21685	IC LK112M33
7017	5322 130 60159	BC846B

ELECTRICAL PARTSLIST

PBAS 5 - AF HAS

DIODES

6203	4822 130 34174	BZX79-B4V7
6204	3198 010 53380	DIO REG BZX79-B3V3

TRANSISTORS & IC

7201	4822 130 40981	BC337-25
7202	5322 130 60159	BC846B
7203	5322 130 60159	BC846B
7204	4822 130 60373	BC856B
7205	9965 000 07780	TL084C
7206	4822 130 42804	BC817-25
7207	4822 130 42804	BC817-25
7208	4822 130 42804	BC817-25
7209	5322 130 60159	BC846B
7210	5322 130 60159	BC846B
7211	5322 130 60159	BC846B
7212	4822 130 41246	BC327-25
7213	4822 130 41246	BC327-25
7403	4822 209 17345	M62320FP
7501	9322 150 74668	IC SM TDA7468D
7601	4822 209 31378	NJM4556MB
7603	4822 130 42804	BC817-25
7604	4822 130 42804	BC817-25
7610	4822 209 33985	TDA8579T/N1
7621	5322 130 60159	BC846B
7622	4822 130 60373	BC856B
7623	5322 130 60159	BC846B
7624	4822 130 40981	BC337-25
7661	5322 130 60159	BC846B
7662	5322 130 60159	BC846B

MODULE AMP - HAS 4CH (40W)

DIODES

5302	2422 536 00625	IND FXD DASM S 15U PM20
5303	2422 536 00625	IND FXD DASM S 15U PM20
5304	2422 536 00625	IND FXD DASM S 15U PM20
5305	2422 536 00625	IND FXD DASM S 15U PM20
5400	4822 157 11411	FXDIND BEAD 100MHZ 80R
5401	4822 157 11411	FXDIND BEAD 100MHZ 80R

DIODES

6600	3198 020 55680	DIO REG SM BZX384-C5V6

TRANSISTORS & IC

7100	9352 719 93518	IC SM TDA8922TH/N1
7100	9352 753 45518	IC SM TDA8922BTH/N2
7300	9352 719 95518	IC SM TDA8921TH/N1
7600	5322 209 11517	PC74HCU04T
7602	5322 130 60159	BC846B
7607	5322 209 14477	HEF4013BT
7608	4822 130 60373	BC856B
7710	5322 130 60159	BC846B
7716	4822 130 60373	BC856B

ELECTRICAL PARTSLIST

HAS MODULE 11G

MISCELLANEOUS

1003	2422 025 17739	CON BM H 124P F MINI-PCI
1012	2422 543 01462	RES XTL SM 20MHZ 20P
1019	⚠ 2422 086 11113	FUSE SM T 750MA 125V
	2822 062 00097	WMOD WIFIG MPCI MP-G-AG-01
	2822 062 00041	HDD 3.5" 40GB 6K040L0

RESISTORS

3112	2350 033 11339	RST NETW SM 4X 33R PM5
3119	2350 033 11339	RST NETW SM 4X 33R PM5
3124	2350 033 11339	RST NETW SM 4X 33R PM5
3125	2350 033 11339	RST NETW SM 4X 33R PM5
3128	2350 033 11339	RST NETW SM 4X 33R PM5
3268	2350 033 11339	RST NETW SM 4X 33R PM5
3330	2350 033 11339	RST NETW SM 4X 33R PM5
3331	2350 033 11339	RST NETW SM 4X 33R PM5
3334	2350 033 11339	RST NETW SM 4X 33R PM5
3336	2350 033 11339	RST NETW SM 4X 33R PM5
3338	2350 033 11339	RST NETW SM 4X 33R PM5
3340	2350 033 11339	RST NETW SM 4X 33R PM5
3342	2350 033 11339	RST NETW SM 4X 33R PM5
3346	2350 033 11339	RST NETW SM 4X 33R PM5
3389	2350 033 11339	RST NETW SM 4X 33R PM5
3395	2350 033 11339	RST NETW SM 4X 33R PM5
3400	2350 033 11339	RST NETW SM 4X 33R PM5
3416	2350 033 11339	RST NETW SM 4X 33R PM5
3422	2350 033 11339	RST NETW SM 4X 33R PM5
3500	2350 033 11339	RST NETW SM 4X 33R PM5
3501	2350 033 11339	RST NETW SM 4X 33R PM5
3508	2350 033 11339	RST NETW SM 4X 33R PM5
3509	2350 033 11339	RST NETW SM 4X 33R PM5
3521	2350 033 11339	RST NETW SM 4X 33R PM5
3539	2350 033 11339	RST NETW SM 4X 33R PM5
3650	2350 033 11339	RST NETW SM 4X 33R PM5
3738	2350 033 11339	RST NETW SM 4X 33R PM5
3827	2350 033 11339	RST NETW SM 4X 33R PM5
3828	2350 033 11339	RST NETW SM 4X 33R PM5
3832	2350 033 11339	RST NETW SM 4X 33R PM5
3836	2350 033 11339	RST NETW SM 4X 33R PM5

INDUCTORS

5001	2422 536 00609	IND FXD SM 1U5 PM20
5002	2422 536 00609	IND FXD SM 1U5 PM20
5003	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5004	2422 549 45589	IND FXD 0603 EMI 100MHZ 47R
5005	2422 549 45589	IND FXD 0603 EMI 100MHZ 47R
5006	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5007	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5008	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5009	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5010	2422 549 43062	IND FXD SM EMI 100MHZ 600R

HAS MODULE 11G

INDUCTORS

5011	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5012	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5013	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5014	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5015	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5018	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5019	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5020	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5021	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5022	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5023	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5024	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5025	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5026	2422 536 00609	IND FXD SM 1U5 PM20
5027	2422 536 00609	IND FXD SM 1U5 PM20
5028	2422 536 00609	IND FXD SM 1U5 PM20
5029	2422 536 00609	IND FXD SM 1U5 PM20
5031	2422 536 00609	IND FXD SM 1U5 PM20
5032	2422 536 00609	IND FXD SM 1U5 PM20
5034	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5035	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5036	4822 157 11716	BLM21P300SPT
5037	4822 157 11716	BLM21P300SPT
5038	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5039	4822 157 11716	BLM21P300SPT
5040	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5041	2422 536 00609	IND FXD SM 1U5 PM20
5042	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5043	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5044	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5047	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5050	2422 536 00392	IND FXD SM 22U PM20
5051	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5052	2422 536 00392	IND FXD SM 22U PM20
5053	4822 157 11716	BLM21P300SPT
5054	2422 536 00823	IND FXD SM 220U PM20
5055	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5056	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5057	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5058	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5059	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5060	2422 536 00609	IND FXD SM 1U5 PM20
5061	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5062	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5063	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5064	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5065	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5067	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5068	4822 157 11716	BLM21P300SPT
5069	2422 549 45589	IND FXD 0603 EMI 100MHZ 47R

ELECTRICAL PARTSLIST

HAS MODULE 11G

INDUCTORS

5071	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5072	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5073	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5074	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5075	2422 549 44608	IND FXD 0603 EMI 100MHZ 1K
5076	2422 549 44608	IND FXD 0603 EMI 100MHZ 1K
5183	2422 536 00609	IND FXD SM 1U5 PM20
5184	2422 536 00609	IND FXD SM 1U5 PM20
5185	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5187	2722 171 00154	TFM PULSE SM TLA-6T118LF

DIODES

6009	4822 130 11528	1PS76SB10
6010	9322 165 17668	DIO SM STPS2L30A
6013	4822 130 11397	BAS316

TRANSISTORS AND IC

7000	9322 184 72668	IC AM29LV320DB-90EI
7002	9322 217 07668	IC K4S561632E-UC75
7004	9352 777 76557	IC SAA7352EL/N103
7005	9322 216 33668	IC MT48LC4M16A2P-7E
7010	9352 786 69557	IC SAA7750EL/N102/S1/G
7011	9322 222 18671	IC EP1C6Q240C8N
7012	3198 010 42320	BC857BW
7014	9352 630 16165	IC 74AHC1GU04GW
7016	9352 686 76125	IC 74LVC1G80GW
7017	5322 209 11102	HEF4052BT
7018	9322 191 99685	IC NCP303LSN29
7021	9322 167 57668	IC KF15BDT
7022	9322 196 92685	IC LK112M18
7023	9322 208 20685	IC LK112M25
7024	3198 010 42320	BC857BW
7025	9340 219 30115	BC817-25W
7026	3198 010 42310	BC847BW
7028	5322 209 90529	MC34063AD
7030	5322 209 82941	LM358D
7031	9322 208 21685	IC LK112M33 (ST00) R
7032	3198 010 42310	BC847BW
7033	3198 010 42310	BC847BW
7034	9322 217 88671	IC AX88796LF
7035	3198 010 42320	BC857BW
7038	3198 010 42310	BC847BW
7039	3198 010 42320	BC857BW
7040	4822 209 33985	TDA8579T/N1
7041	3198 010 42310	BC847BW
7999	5322 209 82941	LM358D

SLOT LOADER MODULE

MISCELLANEOUS

1800	4822 267 11028	CONNECTOR 16P FEM H
1802	2422 025 16836	CON H 19P F 1.00 FFC
1810	2422 540 98519	RES CER 8.467MHZ CSTS*MG03
1820	4822 267 11028	CONNECTOR 16P FEM H
	3103 308 54641	TOHEI-CD-SLOT-DA23SR-ASSY

RESISTORS

3820	!	4822 052 10478	FUS. RST 4R70 5% 0,33W
3840	!	4822 052 10478	FUS. RST 4R70 5% 0,33W
3968	!	4822 052 10108	FUS. RST 1R00 5% 0,33W

DIODES

6881	9322 129 34685	DIO REG SM BZM55-C3V9

TRANSISTORS AND IC

7800	9352 684 20557	IC SAA7325H/T/M2B
7801	9322 181 79668	IC MM1469PH
7803	3198 010 42320	BC857BW
7804	4822 209 72554	MC7808CT
7812	5322 209 82941	LM358D
7875	9340 217 80115	TRA SIG BC847CW
7876	3198 010 44350	TRA SIG BC807-25W
7877	5322 130 42718	BFS20
7878	9340 217 80115	TRA SIG BC847CW
7879	5322 130 60123	BC807-40
7882	4822 209 32852	TDA7073A/N2
7884	3198 010 44350	TRA SIG BC807-25W
7885	3198 010 42320	BC857BW
7886	9340 219 40135	TRA SIG BC817-40W
7887	5322 209 82941	LM358D
7888	9340 217 80115	TRA SIG BC847CW
7890	5322 130 42718	BFS20
7891	5322 130 42718	BFS20
7892	9340 217 80115	TRA SIG BC847CW
7893	9340 217 80115	TRA SIG BC847CW
7894	9340 217 80115	TRA SIG BC847CW